

# TENNESSEE RESERVOIR FISHERIES



## STATEWIDE MANAGEMENT REPORT 2014

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## TWRA Reservoir Fisheries Biologists

### **Regional Management Biologists:**

Region 1: Tim Broadbent – Supervising Fisheries Biologist <sup>During time of report</sup> (Jackson)

Reggie Wiggins – Fisheries Biologist

Region 2: Lyle Mason – Supervising Fisheries Biologist (Nashville)

Brian James – Fisheries Biologist

Jim Pipas – Supervising Fisheries Biologist (Nashville)

Jesse Taylor – Fisheries Biologist

Region 3: Mike Jolley – Supervising Fisheries Biologist (Crossville)

Brandon Ragland – Fisheries Biologist

Brian Letner – Fisheries Biologist

Chris Morton – Fisheries Biologist

Region 4: John Hammonds – Supervising Fisheries Biologist

Jim Negus – Fisheries Biologist

Shaun Ramsey – Fisheries Biologist

### **Statewide Coordination and Analysis**

Fisheries Management Division (Nashville):

Wm. Patrick Black – Reservoir Fisheries Coordinator, Fisheries Statistics

Mike Bramlett – Age and Growth Analysis

Becky Gunn – Administrative Support

## Introduction

Fishing in reservoirs and lakes is a major source of recreation for Tennessee residents and visitors. The state contains 31 large reservoir and 1 large natural lake representing about 500,000 surface acres of water. In 2011 anglers spent \$1.1 billion on fishing related expenditures in Tennessee (U.S Department of the Interior, 2014). Proper management of fishery resources is vital to maintaining sustainability and the Tennessee Wildlife Resources Agency (TWRA) is mandated to see this is accomplished. Proper management techniques include monitoring through surveys, habitat enhancement, research, and supplemental fish stocking. Data collected in the TWRA reservoir program are maintained in a central database.

This report is a presentation of survey statistics and management summaries for reservoirs managed by TWRA. It is intended that the report be used by biologists, administrators, and anglers as a snapshot of the status of fisheries throughout the state. The reported summaries are organized by TWRA regions, individual reservoirs within the regions, and individual species within each reservoir. The data summaries are organized so that ten years of population statistics for a reservoir may be viewed in a single table for each species within a reservoir. This saves the need to refer back numerous years to view trends in population statistics or find the most recent survey for a given location.

Multiple summaries are presented for each species including population parameters (growth, recruitment, and mortality), size structure, condition, creel survey statistics (Black, 2015), and stocking summaries. Different sampling gears are used for different species and these are listed in the tables along with parameters. In some cases, different gears and methods are used for different species and different population parameters. Gear differences also exist for the variety of reservoirs as some gears are not as effective of some water bodies. However, standardized gears and techniques were employed in data collection as much as possible to make meaningful comparisons among reservoirs possible.

Within each reservoir section, the TWRA Regional Biologists provide a written summary to highlight issues, positive outcomes, and recommendations for that reservoir. Any recommendations are a starting point for the discussion of needs, harvest restrictions, and stocking requests and should not be construed as “what will be done”. Recommendation related to allowable size and harvest limits are discussed extensively among TWRA staff and submitted for public review prior being voted on by the Tennessee Fish and Wildlife Commission in October of each year

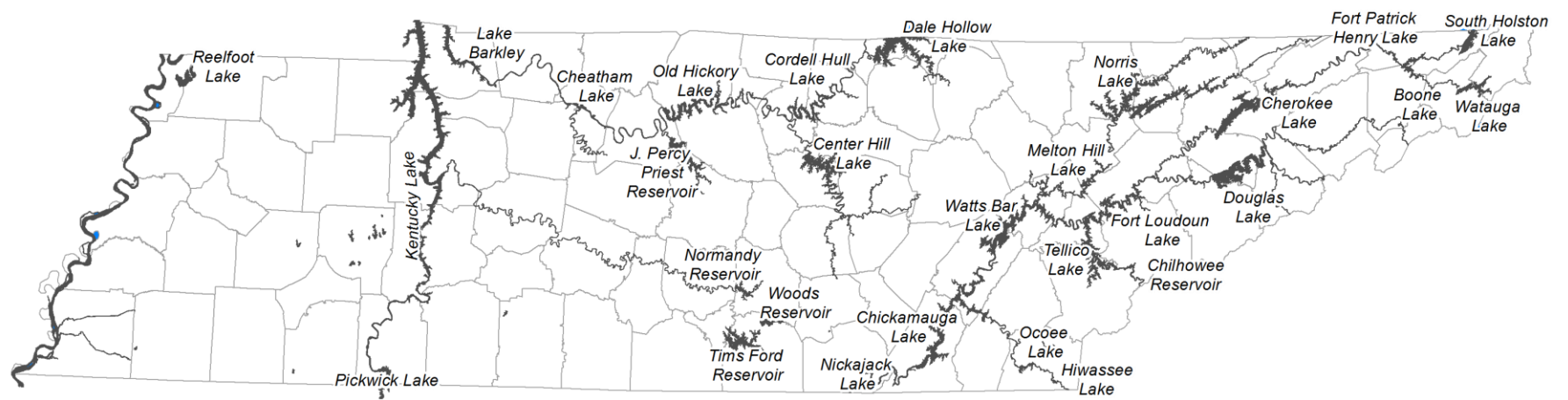


Figure 1 Distribution of major reservoirs (including Reelfoot Lake) in Tennessee.

Table 1. Surface Acreage of Tennessee Reservoirs Greater Than 500 Acres. Reelfoot Lake is included.

Reservoir	Acreage in Tennessee	Total Acres	Data Source*
Barkley	18,300	57,420	3
Boone	4,520		1
Caulderwood	541		1
Center Hill	18,220		2
Cheatham	7,450		2
Cherokee	30,300		1
Chickamauga	34,500		1
Chilhowee	1,750		1
Cordell Hull	11,960		2
Dale Hollow	23,200	27,700	3
Douglas	30,600		1
Ft. Loudoun	14,600		1
Ft. Patrick Henry	872		1
Great Falls	3,080		1
Guntersville	1,156	67,900	3
John Sevier	786		3
J. Percy Priest	14,200		2
Kentucky	108,217	160,300	3
Melton Hill	5,690		1
Nickajack	10,370		1
Normandy	3,048		3
Norris	34,200		1
Old Hickory	22,500		2
Parksville	1,890		1
Pickwick	6,159	43,100	3
Reelfoot L.	10,427		3
South Holston	6,336	7,580	3
Tellico	16,056		3
Tims Ford	10,600		1
Watauga	6,430		1
Watts Bar	39,000		1
Woods	3,660		3
<b>Total</b>	500,618		

\*1. TVA 1980

\*2. U.S. Army Corps  
of Engineers 1978

\*4. TWRA 2006

## Methods

Fishery surveys were conducted using standard methods described in *Reservoir Fisheries Assessment Guidelines* (TWRA, 1998). Gears employed for surveys included boat-mounted electrofishers, trap nets, gill nets, and larval tow nets. Uses of various gear types to monitor sport fish recruitment, mortality, growth, and density were determined at the discretion of the management biologist, and was based on the methods which historically have provided the best estimates for each parameter on a given water body. Efforts were made to distribute the sampling effort across the reservoir to provide a representative sample. Generally, black bass and adult crappie parameters were measured with electrofishing; young-of-year crappie abundance was measured with trap nets and larval tow nets; and *Percid* and *Morone* parameters were measured using gill nets. Water quality was monitored on select reservoirs where fish habitat has been limited historically during the summer months. Measurements were taken with dissolved oxygen / temperature probes at incremental depths throughout the water column.

Creel survey data were collected using the methods described in *Tennessee Statewide Creel Survey 2014 Results* (Black, 2015). Data were collected using roving surveys. Interviews were conducted on-site and face-to-face with full-time creel clerks. Standard question related to determining fishing effort, fishing success, catch rates, catch, harvest, expenditures, and sociological information were asked. Data were entered by IT staff at the TWRA central office and creel estimates and analysis were performed by the TWRA Fisheries Management Division in Nashville, TN.

Habitat enhancements were performed by regional staff and in partnership with the angling public. Fish attractors included submerged cedar and Christmas trees, stake beds, plastic fish attractors, and concrete reef balls. Shoreline stabilization was conducted largely with bald cypress plantings in fluctuation zones and on shoreline points. Aquatic macrophyte plantings and grass seeding in fluctuation zones also occurred at several reservoirs. Methods of plant establishment varied depending on location of objective in establishment.

Fishery data were recorded in the field on datasheets by hand. Data was entered into relational TWRA databases using WinFin software (J. Francis, 2001). Data were analyzed using WinFin data analysis software to produce summaries, population parameters, and indices. Regional biologists analyzed these summaries to produce the tables within this document. Original WinFin outputs and summary reports were retained by the biologists and stored in regional files. All datasets were sent to the reservoir program coordinator at the end of the survey year for incorporation into the statewide reservoir database.

## REGION 1



## Barkley Reservoir - 2014

### Description

Area (acres): TN: 10,350; TOTAL: 57,290 Mean Depth (feet): 15' Shoreline (miles): Total – 1,004

Counties: Stewart, Montgomery, Cheatham Reservoir Length: Total 118 miles  
Drainage: 2,343 sq. miles TN: 72 miles  
TN: 982 sq. miles

Total Fishing Effort (angler hours): Total Value by Anglers: \$

Summer Pool: 359 MSL (57,290 acres) Winter Pool: 354 MSL (45,210 acres)

Tennessee Only: 359 MSL – 20,851 acres; 354 MSL – 16,276 acres

Canal connecting Kentucky and Barkley Reservoirs located at CRM 32.8. Canal= 1.75 miles in length

### Management Strategies:

**Striped Bass/Hybrid Striped Bass:** 15" MLL, 2 fish – 1987

**LMB:** Creel limit reduced from 10 to 5 - 1997

15" MLL, 5 fish creel – 2001

**Crappie:** 10" MLL, 30 fish creel – 1997

**White Bass:** 30 fish creel limit – 1989

**Redear Sunfish:** 20 fish creel – 2008

Creel limit reduced to 15 - 2005

**Sauger:** 15" MLL, 15 fish creel – 1998

15" MLL, 10 fish creel - 2001

### Habitat Enhancement and Monitoring

2013 – None

#### Angling Pressure (Angler Hours per Acre)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Total Angler Pressure	10.5	12.3	13.3	12.7	9.8	NA	NA	NA	22.2	15	12.1
Black Bass	3.8	5.29	4.2	4.8	4.3	NA	NA	NA	6.3	5.3	4.6

#### Tournaments (BITE)

Tournaments <sup>BITE</sup>	3	4	2	2	2	2	2	0			4
Lbs/Angler Day <sup>BITE</sup>	3.81	3.8	3.87	3.73	3.73	5.54	5.87	--			4.1
Fish/Angler Day <sup>BITE</sup>	1.48	1.6	1.76	1.5	1.5	2.2	2.33	--			1.8
Angler Hours <sup>CREEL</sup>											
Catch Rate <sup>CREEL</sup>											

#### Value of Fishery (Trip Expenditures in Thousands)

Black Bass	174.7	332.3	267.3	410.5	441.5	NA	NA	NA	494.4	920.1	353.5
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## Largemouth Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Spring Electro hours</b>	2	2	2	2	2	2	2	2	2	2	2
<b>Fall Electro hours</b>	2.01	2.22	2.65	3.54	3.85	3.46	2.68	5.6	3.7	5.18	2.73
<b>Recruitment</b>											
Age-1 CPUE	--	--	2.3	--	--	7	29.3	3.8	--	--	11.9
Substock CPUE	14.5	13	3.5	9.5	24	8.5	19	6.5	11	17.5	12.4
<b>Spring Density (n)</b>	123	153	183	209	223	239	196	222	142	192	179
PSD	62	69	72	52	36	50	85	81	63	78	62
RSD Preferred	29	33	38	22	14	24	31	34	28	41	27
CPUE	61.5	76.5	91.5	104.5	111.5	119.5	98	111	71	96	89.7
CPUE ≥ Stock	47	63.5	88	95	87.5	111	79	104.5	60	78.5	77.3
CPUE ≥ MSL (15")	13.5	21.5	32.5	20.5	31.5	27	15	35.5	16.5	32	21.3
<b>Fall Density (n)</b>	134	168	179	378	378	429	275	438	307	352	242
Fall Total CPUE	66.7	77.3	70.5	116.5	78.5	122.6	106.9	87.5	80.9	66.7	83.3
Fall CPUE Substock	4.3	3.2	11.3	22.1	5.6	12.1	7.4	13.2	7.6	4.4	8.4
Fall CPUE>Stock	62.4	74.1	59.2	94.5	72.9	110.5	99.4	74.4	73.4	62.4	74.7
<b>Growth</b>											
Mean TL at Age-1	--	--	165	--	--	128	178	134	--	--	156.8
Mean TL at Age-3	--	--	332	--	--	--	--	305	--	--	302.5
<b>Mortality</b>											
Total Mortality	--	--	3% r2=0.84	--	--	--	--	42% r2=0.8	--	--	
<b>Relative Weight (Fall)</b>											
Stock	96	92	115	99	97	99	89	96	89	107	96
Quality	93	88	97	95	90	97	90	94	91	91	92
Preferred	101	92	100	97	107	95	93	96	94	98	96
Memorable	106	103	102	105	106	97	91	92	102	91	103
Trophy		--	--	--	--	--	--	--		--	
<b>Fishing Success</b>											
Catch Rate	0.78	1.11	1.3	2.01	1.63	NA	NA	NA	1.03	0.94	1.2
Harvest Rate	0.12	0.19	0.15	0.24	0.16	NA	NA	NA	0.11	0.1	0.1
% Released	92	98	98	98	99	NA	NA	NA	91	90	97
Mean Weight	2.08	2.69	1.79	2.58	2.14	NA	NA	NA	3.39	2.85	2.2

**FISHERY FORECAST**

Largemouth bass experienced good recruitment twelve of the last fifteen years (2002, 2007, 2012 below average) and these fish have recruited well to quality sizes. Total CPUE has exceeded 60 LMB/hour since 1991 although fluctuations have occurred in recruitment. Size structure indices showed quality fish in the population and relative stock indices exceeded the acceptable range; increased recruitment has increased stock size fish in the population and these fish recruited well to quality sizes. Recruitment was similar between all sections (21.3, 17.3, and 12.0 in Sections 1, 2, 3, respectively) and total catch rates were higher (124.0, 81.3, 76.0 in sections 1,2,3, respectively) in the two most upstream sections. The density of larger fish ( $\geq 15$ " ) has increased overall and has improved over levels seen in the mid-1990's; 34% and 39% of the largemouth bass collected in the Spring and Fall, respectively, were larger than the minimum size limit (15"). Fall electrofishing surveys showed recruitment of young-of-year largemouth bass to the Fall was below the 10-year average; stock size fish appeared to be abundant and Wr's measured below acceptable levels in the quality and memorable ranges.

Anglers spent 5.3 hours per acre seeking all black bass. However, it was felt the majority of these hours were spent seeking largemouth bass since smallmouth bass and spotted bass are scarce. Catch rates were good and harvest rates were poor with over 90% of the fish caught released.

In 2014, anglers spent \$6.64 per hour seeking black bass and were willing to spend an additional 31% to fish for black bass on Barkley Reservoir. Trip expenditures exceeded the 10 year average by 160%. The total value of the black bass fishery was estimated at \$475,590, the highest in the 21<sup>st</sup> century.

**MANAGEMENT RECOMMENDATIONS:**

Continue with the 15-inch minimum size limit with a five fish per day creel limit.

**Spotted Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Spring Electro hours</b>	2	2	2	2	2	2	2	2	2	2	<b>2</b>
<b>Fall Electro hours</b>	2.01	2.22	2.65	3.54	3.85	3.46	2.68	5.6	3.7	5.18	<b>2.7</b>
<b>Recruitment</b>											
Age-1 CPUE	--	--	--	--	--	--	--	--			
Substock CPUE	1	0.5	0	3	0	1	0	1.5	2.5	0	<b>0.7</b>
<b>Density</b>											
<b>Spring Density (n)</b>	9	21	22	26	22	44	14	19	43	27	<b>22.7</b>
PSD	29	55	73	75	73	48	100	56	58	56	<b>61</b>
RSD Preferred	14	20	18	20	5	10	40	19	13	11	<b>16</b>
CPUE	3.5	10.5	11	13	11	22	7	9.5	21.5	13.5	<b>11.2</b>
CPUE $\geq$ Stock	4.5	10	11	10	11	21	7	8	19	13.5	<b>10.5</b>
CPUE $\geq$ Preferred	0.5	2	2	2	0.5	2	1	1.5	2.5	1.5	<b>1.4</b>
<b>Fall Density (n)</b>	22	15	21	14	17	16	7	41	52	31	<b>14.7</b>
Fall Total CPUE	11	5.8	9.2	3.5	4.3	4.4	--	6.9	14.7	9.3	<b>6</b>
Fall CPUE Substock	2.5	0.3	1.6	0.2	1.2	1	--	3.3	0.2	2.6	<b>0.9</b>
Fall CPUE $\geq$ Stock	8.5	5.5	7.6	3.3	3.2	3.4	--	3.6	14.5	6.7	<b>5</b>
Fall CPUE $\geq$ Preferred	0.6	0.3	0.7	0.4	0	0	--	0	0.1	0.2	<b>0.4</b>
<b>Relative Weight</b>											
Stock	97	103	107	103	91	109	--	--	93	100	<b>100</b>
Quality	98	107	99	85	96	101	--	--	92	92	<b>98</b>
Preferred	91	114	85	92	--	--	--	--	83	95	<b>96</b>
Memorable	--	--	--	--	--	--	--	--	--	--	
Trophy	--	--	--	--	--	--	--	--	--	--	
<b>Fishing Success (Spotted bass only)</b>											
Relative Catch Rate	0.01	--	0.02	--	--	NA	--	NA	0.06	0.15	<b>0.32</b>
Relative Harvest Rate	0.0	--	0	--	--	NA	--	NA	0	0	<b>0.0</b>
% Released	54	--	100	--	--	NA	--	NA	94	99	<b>78</b>
Mean Weight	0.9	--	--	--	--	NA	--	NA	1.81	--	<b>1.46</b>

In the Spring 15%, 70%, and 15% of the spotted bass were collected in Sections 1, 2, and 3, respectively; in the fall 16%, 16%, and 68% of the spotted bass were collected in Sections 1, 2, and 3, respectively.

## White Crappie

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment (Trap Net Survey)</b>											
Age-0 CPUE	--	--	--	2.8	3.1	5.5	--	7.9	--	--	<b>3.3</b>
Substock CPUE	10.1	0.7	0.6	2.3	3.4	6.7	4.4	7.6	5.6	7.9	<b>4.6</b>
Total CPUE	12.4	10.3	1.6	3.5	6.1	9.8	11.8	10.6	6.7	9.3	<b>7.9</b>
Net Nights	31	32	32	32	32	32	32	32	32	32	<b>32</b>
n	383	328	46	111	194	312	427	339	215	298	<b>256.8</b>
<b>Fall Density (Electrofishing Survey)</b>											
PSD	97	91	100	99	88	94	92	90	99	98	<b>94</b>
RSD Preferred	82	78	87	80	41	69	78	66	85	86	<b>69</b>
CPUE	51.4	38.9	29.9	32.2	12.8	52.4	31.1	20	17.8	39.1	<b>38.7</b>
CPUE ≥ Stock	51.4	38.9	29.9	31.8	12.8	52	31.1	20	17.8	39.1	<b>40.8</b>
CPUE ≥ MSL (10")	41.6	30.1	29.9	28.6	5.5	35.8	24.6	13.8	14.3	33.3	<b>29.6</b>
n	117	86	78	114	51	190	98	119	93	199	<b>107</b>
Fall Hours	2.01	2.22	2.65	3.54	3.85	3.46	2.68	5.6	3.7	5.18	<b>2.74</b>
<b>Growth (Fall)</b>											
Mean TL at Age-0	--	--	--	96	78	88	--	85	--	--	<b>86</b>
Mean TL at Age-2 Fall	--	--	--	283	--	--	--	263	--	--	<b>283</b>
<b>Mortality</b>											
Total Mortality	--	--	--	33% r2=68	--	--	--	40% r2=0.77	--	--	
<b>Relative Weight (Fall)</b>											
Stock	114	94	--	111	197	94	90	112	99	122	<b>110</b>
Quality	107	129	101	108	100	113	102	112	91	99	<b>106</b>
Preferred	106	100	110	108	104	109	97	105	96	101	<b>101</b>
Memorable	97	94	102	102	102	106	96	99	94	99	<b>96</b>
Trophy	--	--	--	--	--	--	--	--	--	--	
<b>Angling Pressure (Angler Hours per Acre)</b>											
All Crappie	3.75	3.7	5	3.6	2.49	NA	NA	NA	3.32	1.8	<b>4</b>
<b>Fishing Success</b>											
Crappie Catch Rate	1.7	3.5	3	3.74	2.6	NA	NA	NA	1.87	2.02	<b>2.38</b>
Crappie Harvest Rate	0.8	2	1.8	2.41	1.46	NA	NA	NA	1.07	1.12	<b>1.27</b>
WC % Released	51	48	42	37	45	NA	NA	NA	50	40	<b>51</b>
WC Mean Weight	0.65	0.73	0.71	0.73	0.69	NA	NA	NA	0.76	0.78	<b>0.67</b>
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
All Crappie	56.3	92.8	125.4	130	111.1	NA	NA	NA	153.5	98.8	<b>100</b>

**FISHERY FORECAST:**

The white crappie population experienced poor year class strength in four of the last twelve years ( 2004, 2006 – 2008; CPUE YOY crappie  $\geq 3.0$  equals average year class). However, recruitment has exceeded the acceptable density in the last five years. In 2014, recruitment appeared to be acceptable in Sections I and II (Section I: 7.1 YOY/net; Section II: 8.8 YOY/net). Reservoir wide recruitment was higher than the 10 year average; CPUE of stock size fish remained below the ten year average although RSD10 improved. The PSD and RSD10 were indicative of a population with large individuals and were similar to historic data. The decline in CPUE greater than 10" in 2012 and 2013 may have been as a result of poor recruitment in 2006 – 2008. Catch rates in 2014 were comparable to the 10 year average.

Historic creel data (no creel survey in 2010, 2011, 2012) showed catch and harvest rates were good and anglers released as many fish as they harvested. In 2014, catch and harvest rates remained good although they fell below historical levels. Overall, 68% of the crappie harvested by anglers were white crappie

Anglers spent \$3.60 per hour seeking crappie and were willing to spend an additional 51% to fish for crappie on Barkley Reservoir. The total value of the crappie fishery was estimated at \$98,810.00.

**MANAGEMENT RECOMMENDATIONS:**

Continue with the 10-inch minimum size limit and the 30 fish creel limit.

## Black Crappie

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment (Trap Net Survey)</b>											
Age-0 CPUE	--	--	--	0.5	1.1	--	--	0.8	--	--	<b>0.7</b>
Substock CPUE	2.7	1.6	0.5	0.5	1.1	2	2.4	1.4	5.8	1.5	<b>1.8</b>
Total CPUE	7.7	6	1.5	3	2.3	4.4	7.4	2.4	7	4	<b>5.2</b>
Net Nights	31	32	32	32	32	32	32	32	32	32	<b>32</b>
n	239	192	44	96	74	139	282	76	225	128	<b>171</b>
<b>Fall Density (Electrofishing Survey)</b>											
PSD	92	84	98	92	94	80	59	83	99	64	<b>81</b>
RSD Preferred	35	44	78	74	74	64	20	44	81	49	<b>38</b>
CPUE	98.8	55.8	72.3	54.1	21.6	43.9	25.5	28.8	17.4	30.7	<b>58.1</b>
CPUE ≥ Stock	98.8	55.8	72.3	49.4	20.3	34.8	25.5	28.7	17.4	30.2	<b>56.6</b>
CPUE ≥ MSL (10")	36.3	25.2	46.9	40.0	15.9	27.3	5	12.7	13.9	12.4	<b>19.6</b>
n	245	149	198	189	80	168	76	207	80	157	<b>168</b>
Fall Hours	2.01	2.22	2.65	3.54	3.85	3.46	2.68	5.6	3.7	5.18	<b>2.7</b>
% Black Crappie	68	63	72	62	61	47	46	64	46	44	<b>60</b>
<b>Growth (Fall)</b>											
Mean TL at Age-0 Fall	--	--	--	76	95	--	--	74	--	--	<b>82</b>
Mean TL at Age-2 Fall	--	--	--	272	--	--	--	224	--	--	<b>272</b>
<b>Mortality</b>											
Total Mortality	--	--	--	29% r2=93	--	--	--	33% r2=31	--	--	
<b>Relative Weight (Fall)</b>											
Stock	94	107	101	116	97	101	94	109	101	100	<b>100</b>
Quality	99	97	109	111	98	110	98	106	97	105	<b>99</b>
Preferred	98	93	104	102	101	104	88	102	91	89	<b>95</b>
Memorable	89	102	98	97	103	102	78	96	97	88	<b>94</b>

## FISHERY FORECAST

The black crappie electrofishing CPUE declined below the 10-year average for the seventh straight year. However, trap net substock CPUE has been consistent during the last four years and trap net total CPUE and substock CPUE has been consistent.. The percentage of black crappie compared to white crappie percentage declined in 2013 and 2014. Historic creel data has shown acceptable relative catch rates although lower than seen for white crappie. The fishery forecast and management recommendations were the same as for white crappie

## Redear Sunfish

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b>											
(Trap net)											
Age-1 CPUE	--	--	--	--	--	--	--	--	--	--	
Substock CPUE	0.4	0.3	1	0.7	0.3	0.1	0.2	0.6	0.03	0.5	<b>0.4</b>
Total CPUE	2.7	2.5	32.8	4.3	2.6	1.6	3.5	1.6	0.4	1.6	<b>5.6</b>
Net Nights	31	32	32	32	32	32	32	32	32	32	<b>32</b>
n	83	80	105	136	84	52	119	50	13	52	<b>76</b>
<b>Spring Density (Electro Survey)</b>											
PSD	31	78	33	57	28	4	--	64	43	59	<b>32</b>
RSD Preferred	3	22	5	43	15	0	--	21	7	9	<b>12</b>
CPUE	18.5	4.5	23	33.5	51	11.5	--	66	23	18.5	<b>24.5</b>
CPUE ≥ Stock	14.5	4.5	22	30.5	40	11.5	--	65.5	22	17	<b>21.3</b>
CPUE ≥ Preferred	0.5	1	1	13	6	0	--	14	1.5	1.5	<b>2.9</b>
n	37	9	46	67	102	23	2	132	46	37	<b>44</b>
Spring Hours	2	2	2	2	2	2	2	2	2	2	<b>2</b>
<b>Angling Pressure (Angler Hours per Acre)</b>											
Sunfish	<0.1	0.4	0.5	1.0	0.26	NA	NA	NA	0.6	0.47	<b>0.6</b>
<b>Fishing Success (Redear Sunfish only)</b>											
Relative Catch Rate	--	1.31	0.75	1	0.5	NA	NA	NA	0.26	0.05	<b>1.08</b>
Relative Harvest Rate	--	1.29	0.65	1.0	0.36	NA	NA	NA	0.13	0.02	<b>0.95</b>
Redear Mean Weight	0.43	0.38	0.51	0.52	0.42	NA	NA	NA	0.5	--	<b>0.5</b>
Redear % Released	9	23	20	3	20	NA	NA	NA	56	55	<b>20</b>
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
Sunfish	1.6	10.6	10.5	41.8	11.3	NA	NA	NA	13.8	13	<b>9.7</b>

## FISHERY FORECAST

Redear sunfish abundance appeared to decrease over historic levels. The majority of the redear sunfish were collected in the most northern section (73%).

## MANAGEMENT RECOMMENDATIONS

Continue with the 20 fish creel limit implemented in 2008.



## Bluegill

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment (Trap Net)</b>											
Age-1 CPUE	--	--	--	--	--	--	--	--	--	--	
Substock CPUE	3.2	3.2	1.3	8	1.7	1.4	1.1	9.7	0.6	3.3	<b>2.4</b>
Total CPUE	12.5	16	5.9	13.5	7.6	6.1	9.1	15.8	4.8	10.4	<b>9</b>
Net Nights	31	32	32	32	32	32	32	32	32	32	<b>32</b>
n	388	512	188	435	243	194	291	504	152	332	<b>286.4</b>
<b>Density (Electrofishing Survey)</b>											
PSD	58	11	25	26	31	37	50	37	31	27	<b>31</b>
RSD Preferred	0	0	0	0	2	1	3	1	2	1	<b>1</b>
CPUE	76	125.5	86	169	132	98.5	46.5	170.5	154	138	<b>102</b>
CPUE ≥ Stock	71.5	107	82.5	156.5	128	91.5	44	169.5	144.5	130	<b>95.9</b>
CPUE ≥ Preferred	0	0	0	0.5	2	0	0.5	1.9	3	1.5	<b>0.3</b>
n	152	251	172	338	264	197	93	341	308	276	<b>204</b>
Spring Hours	2	2	2	2	2	2	2	2	2	2	<b>2</b>
<b>Angling Pressure (Angler Hours per Acre)</b>											
Sunfish	<0.1	0.4	<0.1	1.0	0.26	NA	NA	NA	0.6	0.47	<b>0.5</b>
<b>Fishing Success (Bluegill only)</b>											
Relative Catch Rate	16.52	7.5	7.19	6.73	5.47	NA	NA	NA	1.85	2.05	<b>11</b>
Relative Harvest Rate	13.13	4.34	5.32	5.29	3.44	NA	NA	NA	0.9	0.79	<b>9.2</b>
Bluegill Mean Weight	0.25	0.3	0.23	0.27	0.22	NA	NA	NA	0.4	0.35	<b>0.28</b>
Bluegill % Released	36	66	43	29	38	NA	NA	NA	64	65	<b>36</b>
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
Sunfish	1.6	10.6	10.5	41.8	11.3	NA	NA	NA	13.8	13	<b>9.7</b>

## FISHERY FORECAST

Bluegill were abundant but not at quality sizes to persuade anglers to actively seek this species; RSD values increased above historical levels and length frequencies show larger individuals in the population in 2011 and 2013. However, catch rates were typical of catch rates seen in other west Tennessee reservoirs. PSD-RSD's were similar between sections (33-2, 25-0, and 18-0, in sections 1, 2, 3, respectively).

Although catch and harvest rates declined over historic levels, the quality of bluegill exceeded the 10 year average. These data reflect the increased RSD8 values seen during sampling surveys.

## MANAGEMENT RECOMMENDATIONS

No recommendations are necessary.

## Sauger

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Net Hours	--	8.8	14.6	13.4	No sample	11.3	No Sample	No Sample	No Sample	11.6	12.02
n	--	234	35	30		71				37	53.9
<b>Recruitment (Gillnet Survey)</b>											
Age-1 CPUE	--	17.2	--	1.9		2.9				1.3	4.5
Substock CPUE	--	0	0.0	0.0		0				0	0.08
PSD	--	34	91	43		46				62	58
RSD Preferred	--	10	36	13		12				32	27
CPUE	--	24.7	1.4	2.3		5.5				3.9	2.3
CPUE ≥ Stock	--	24.7	1.4	2.3		5.5				3.9	2.3
CPUE ≥ MSL (15")	--	2.5	0.5	0.9		2.5				1.3	0.4
<b>Growth</b>											
Mean TL at Age-1	282				271					292	278
Mean TL at Age-3	444				379					410	412
<b>Relative Weight</b>											
Stock	--	87	137	92		87				NA	93
Quality	--	90	93	96		97				NA	88
Preferred	--	100	101	110		107				NA	94
Memorable	--	--	--	--		-				NA	
Trophy	--	--	--	--		--				NA	
<b>Mortality</b>											
Total Mortality	42% r2=91	--		--	64% r2=75		70% r2=94				
<b>Stocking</b>											
Total No.				45410 fry					126,508		
<b>Angling Pressure (Angler Hours per Acre)</b>											
Sauger									1.3	0.85	1.3
<b>Fishing Success (Bluegill only)</b>											
Catch Rate						NA	NA	NA	0.32	0.83	
Harvest Rate						NA	NA	NA	0.11	0.39	
Mean Weight						NA	NA	NA	1.61	1.57	
% Released						NA	NA	NA	54	43	
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
Sauger	--					NA	NA	NA	60.8	50.5	

2009 and 2011, 2012, 2013– No sample due to high water and high discharge during sampling period.

## FISHERY FORECAST

CPUE in 2010 nearly doubled historic catch rates and the catch rate of legal size fish was six times the historic value. As with historic data, stock to quality size fish dominated the sample. Growth rates were similar between 2002, 2004, 2006, and 2008, but mortality rates have increased since the early 2000's. The mean length at age and maximum age were similar to populations observed below Pickwick Dam. During creel survey, 72% of the fish measured were ≥ 16-inches and 10% were ≥ 18-inches.

Creel data revealed improved catch and harvest rates.

## MANAGEMENT RECOMMENDATIONS:

Continue with the 15-inch minimum size limit and the 10 fish creel limit.

## Channel Catfish

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Net Hours	--	8.8	14.6	13.4	No sample	11.3	No Sample	No Sample	No Sample	11.6	12
n	--	21	28	453		10				2	140.6
<b>Recruitment (Gillnet Survey)</b>											
Age-1 CPUE	--	--	--	--		--					
Substock CPUE	--	1.4	1.7	22.2		0.4					5.3
Total CPUE	--	2.4	3.2	33.8		0.8					12.1
<b>Density</b>											
PSD	--	--	--	--		--					
RSD Preferred	--	--	--	--		--					
CPUE	--	2.4	3.2			--					8.1
CPUE ≥ Stock	--	1	1.5	11.6		0.4					2.8
CPUE > Quality	0	0	0.1	0.8		0					0.3
CPUE ≥ MSL (34")	0	0	0.0	0.0		0					0
<b>Angling Pressure (Angler Hours per Acre)</b>											
Catfish	--	--	--	--	2.1	NA	NA	NA		3.77	1.8
<b>Fishing Success</b>											
Catch Rate	2.4	3.2		0.89	0.88	NA	NA	NA	0.99	0.96	1.04
Harvest Rate	1	1.5	11.6	0.85	0.83	NA	NA	NA	0.68	0.59	0.9
% Released	0	0.1	0.8	11	5	NA	NA	NA	32	63	12.6
Mean Weight	0	0.0	0.0	2.05	2.24	NA	NA	NA	2.39	1.9	1.98
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
Catfish	40.2	41.3	58.0	58.8	70.3	NA	NA	NA	266.2		44.4

2009 and 2011, 2012, 2013 – No sample due to high water and high discharge during sampling period.

## FISHERY FORECAST

Historic data has shown channel catfish were the dominant species collected during sauger netting and harvested by anglers. Although substock channel catfish comprised the majority of the fish collected, angler data and angler reports have indicated a quality blue catfish population in Barkley Reservoir.

## MANAGEMENT RECOMMENDATIONS:

No recommendations are necessary.

## Gizzard Shad

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Fall Electro Hours	2.01	2.22	2.65	3.54	3.85	3.46	2.68	5.6	3.7	5.18	2.7
<b>Recruitment</b>											
CPUE < 150 mm	39.4	0.3	24.5	11	11.9	98.8	70.2	32.3	44.1	46	33.3
CPUE ≥ 275 mm	2	6.8	10.6	18	0.4	0.4	1.5	3	0.5	0.2	5.8
<b>Density</b>											
Fall total CPUE	107	107.9	136.6	102.4	98.7	153.4	167	81.5	58.4	120.4	123.1
Fall CPUE Substock	70.2	13.4	36.3	24.2	29.1	106.5	113	38.4	29.4	69.2	53.2
Fall CPUE ≥ Stock	36.8	94.5	100.3	78.2	69.6	46.9	54	43.1	29	51.3	76.1
Fall total collected (n)	213	244	339	346	376	508	452	453	317	419	330

## DISCUSSION

CPUE was comparable to historic CPUE data in 2014. CPUE varied as sampling progressed upstream (56.0 -, 172.1-, and 128.0 per hour in Sections 1, 2, 3, respectively). Approximately 45-, 77-, and 44% of the gizzard shad collected in sections 1, 2 and 3, respectively were substock. Since Asian carp have been collected during surveys, Wr's were calculated for gizzard shad (2014: stock=102; stock-quality=102; 2013: stock = 91; Stock-quality=92) and trend data will be monitored.

## Threadfin Shad

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Density</b>											
Fall CPUE ≤ 75 mm	37.7	48.7	23.5	106.9	60	54.6	87.3	69.1	90	60.2	63
Fall Total CPUE	76.5	103.6	118.6	106.9	103.9	56.4	106.8	89.8	102.1	67	96.5
Fall Total collected (n)	135	239	128	365	379	195	307	499	583	319	239

## DISCUSSION

As with gizzard shad, CPUE of threadfin shad fluctuated as sampling progressed upstream (44.7-, 93.9-, and 64 per hour in Section 1, 2, and 3 respectively). Size distributions were similar between sections and threadfin shad were collected at preferred sizes for predators.

## MANAGEMENT RECOMMENDATIONS

No recommendations are necessary.

## White Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Net Hours	--	8.8	14.6	13.4	No Sample	11.3	No Sample	No Sample	No Sample	11.6	12
n	--	35	15	40		23				11	26.2
<b>Recruitment (Gillnet Survey)</b>											
Age-1 CPUE	--	--	--	1.1		--				--	0.6
Substock CPUE	--	0	--	0		0				0	0.2
Total CPUE	--	4	--	3		1.8				1	3.3
<b>Growth</b>											
Mean TL at Age-1	--	--		250		--				--	249
Mean TL at Age-3	--	--	--	364		--				--	330
<b>Mortality</b>											
Total Mortality	--	--	--	43% r2=73		--				--	

2009 and 2011, 2012, 2013 – No sample due to high water and high discharge during sampling period.

During creel survey, 14% of the white bass measured were greater than 14-inches.

## Striped Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Net Hours	--	8.8	14.6	13.4	No Sample	11.3	No Sample	No Sample	No Sample	0	12
n	--	5	7	19		16				11.6	8.3
<b>Recruitment (Gillnet Survey)</b>											
Age-1 CPUE	--	--	--	0.9		--				0	0.6
Substock CPUE	--	--	--	0.05		0.5				0	
Total CPUE	--	--	--	3.08		1.4				0	
<b>Growth</b>											
Mean TL at Age-1	--	--	--	291		--					293
Mean TL at Age-2 Fall	--	--	--	583		415					583
<b>Mortality</b>											
Total Mortality	--	--	--								
<b>Stocking</b>											
Total No.	--	--	--	--							--

2009 and 2011, 2012, 2013 – No sample due to high water and high discharge during sampling period.

**Other Species Collected**

<b><u>Species</u></b>	<b><u>Number Collected</u></b>	<b><u>Gear</u></b>	<b><u>Value</u></b>
Black Crappie	1	Gill Netting	<0.1
Channel Catfish	2	Gill Netting	0.2
	5	Trap Net	0.2
Flathead catfish	1	Trap Net	<0.1
Freshwater Drum	18	Trap Net	0.6
Gizzard Shad	45	Trap Net	1.4
Golden Redhorse	1	Trap Net	<0.1
Green Sunfish	2	Trap Net	<0.1
Logperch	4	Trap net	0.1
Longear Sunfish	42	Trap Net	1.3
Orangespotted sunfish	23	Trap Net	0.7
River Redhorse	2	Gill Netting	0.2
Sauger	1	Fall Electro	0.2
Shorthead Redhorse	6	Gill Netting	0.5
Silver carp	1	Fall electro.	0.2
Silver Redhorse	1	Gill Netting	<0.1
Skipjack Herring	2	Fall Electro	0.4
	5	Gill Netting	0.4
Smallmouth Bass	1	Fall electro.	0.2
	2	Spring Electro	1.0
Spotted Bass	5	Trap Net	0.2
Spotted Sucker	22	Trap Net	0.7
	76	Gill Netting	6.6
Threadfin Shad	100	Trap Net	3.2
Walleye	3	Gill Netting	0.3
Warmouth	18	Trap Net	0.6
White Bass	5	Spring electro	2.5
	18	Fall Electro	3.5
Yellow Bass	84	Trap Net	2.6
	6	Gill Netting	0.5

Several silver carp were seen in Hickman and Dyer Creeks during Fall sampling.

Value: Trap net - number per net night

Electrofishing - number per hour

Gill net - number per hour

**2014 Water Quality Monitoring**

The Tennessee valley experienced drought conditions in 2007 and 2008. Although drought conditions appeared to subside in 2009, drier conditions continued in the summer 2010 and 2011. In addition, the USACOE continued work on Wolf Creek Dam (Cumberland Lake) and the Center Hill Dam which resulted in reduced flows through the Cumberland River system. In 2009, water quality conditions at Barkley Reservoir improved over 2007 and 2008 readings. In 2013 and 2014, surface water temperatures did not exceed 30 C during sampling dates in June, July and August.

At station 1 (CRM 78.1), dissolved oxygen levels remained above 4.0 ppm at all depths in June, July and August. Water temperatures at station 1 exceeded water temperatures at station 2 at all depths during all months sampled. Secchi disc readings were indicative of a riverine portion of a mainstream reservoir (123, 79, and 112 cm in June, July, August, respectively); conductivity ranged from 211- (July) to 253 (June); pH levels also fell within acceptable ranges (8.1, 7.8, 8.0 in June, July, and August, respectively). Alkalinity averaged 68 mg/l during June through August which was slightly lower than historic records.

At station 2 (CRM 105) water temperatures were cooler than seen downstream and dissolved oxygen level were at acceptable levels at all depths each month. Secchi disc readings were slightly lower (120-, 70, 99 cm in June, July, and August, respectively); conductivity readings were similar between stations and similar to historic data. Alkalinity averaged 87 mg/l during June – August.

**Sampling Stations:** CRM 78.0 and CRM 105.

## Kentucky Reservoir - 2014

### Description

Area (acres): TOTAL:160,300 TN: 108,217 Mean depth (feet) – 20' Shoreline (miles): 2,380

Counties: Stewart, Henry, Benton, Houston, Humphreys, Decatur, Perry, Wayne, Hardin

Total Fishing Effort (angler hours): 1,390,358 Total Value by Anglers: \$6,142,050

1.75 mile long canal connecting Kentucky and Barkley Reservoirs located at TRM 25.3

Summer Pool: 359 MSL  
miles

Winter Pool: 354 MSL

Drainage area: 40,200 sq.

### Management Strategies:

*Striped Bass/Hybrid Striped Bass* – 15" MLL, 2 fish - 1987

#### LMB/SMB:

Creel limit reduced from 10 fish to 5 fish in 1997.

13" MLL lakewide – 1998

14" MLL north of TNRM 111.1 and

13" MLL south of that point - 2000.

14" MLL reservoir-wide -2001.

15" MLL lakewide – 2003

*White Bass*: 30 fish creel limit - 1989

Creel limit reduced to 15 - 2005

*Crappie*: 10" MLL with 30 fish creel – 1997

*Sauger*: 14" MLL with 15 fish creel – 1992

14" MLL with 10 fish creel - 2001

15" MLL with 10 fish creel - 2014

*Redear Sunfish*: 30 fish creel limit - 2008

20 fish creel limit - 2013

### Habitat Enhancement and Monitoring

Shallow water fish attractors (stake beds) – 142

Cypress Tree Plantings – 122 trees

Deep water Fish attractors (refurbished) – 7 of 28

### Angling Pressure (Angler Hours per Acre)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Total Angler Pressure (hrs/acre)	14.5	13.8	13.7	13.7	16.8	12.9	13.1	14.8	12.5	10.3	14.8

### Black Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Angling Pressure (Angler Hours per Acre)</b>											
All Black Bass	2	2	2.5	2.62	4.43	3.6	3.9	4.45	3.8	3.6	2.8
Smallmouth	<0.1	<0.1	0.0	<0.1	0.04	0	0	0.01	0.3	--	
<b>Tournaments</b>											
Tournaments <sup>BITE</sup>	7	2	6	19	12	0	0	0	0		19
Lbs/Angler Day <sup>BITE</sup>	4.37	2.31	5.03	6.0	6.6	--	--	--	--		3.9
Fish/Angler Day <sup>BITE</sup>	1.68	1.08	2.06	2.2	2.01	--	--	--	--		1.6
Angler Hours <sup>CREEL</sup>											
Catch Rate <sup>CREEL</sup>											
<b>Fishery Value (Trip Expenditures in Thousands)</b>											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Black Bass	1,069	1,324	1,538	2,103	4,259	2,031	4,266.50	4,569.20	2,948.00	4,248	1,603
Smallmouth	5.7	4.5	0	2.5	27.1	0	0	2.5	16.1	--	9.1



## Largemouth Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Spring Electro hours</b>	6	6	6	6	6	6	6	6	6	6	<b>6</b>
<b>Fall Electro hours</b>	4.96	6.74	8.96	7.71	7.89	6.68	4.08	8.02	7.3	6.79	<b>6.3</b>
<b>Recruitment</b>											
Age-1 CPUE	--	11.7	--	--		12.5	11.2	--	--	--	<b>15</b>
Substock CPUE	11.2	10.8	15	33.0	43.5	17.7	7.8	18.3	10.5	11.2	<b>17</b>
<b>Spring Density (n)</b>	354	377	506	695	783	627	501	584	388	531	<b>520</b>
PSD	79	81	77	47	61	64	85	73	68	64	<b>67</b>
RSD Preferred	29	35	38	27	21	18	21	30	44	37	<b>26</b>
CPUE	59	62.8	84.3	115.8	130.5	104.5	83.5	97.3	64.7	88.5	<b>83</b>
CPUE ≥ Stock	47.8	52	70	82.8	87	86.8	76	79	54.2	77.3	<b>66</b>
CPUE ≥ MSL (15")	14	18.2	25.9	22.5	18.2	16	15.8	23.8	23.8	28.5	<b>17</b>
<b>Fall Density (n)</b>	279	239	451	676	385	383	398	396	433	345	<b>338</b>
Fall Total CPUE	56.2	35.5	56.1	91.3	63.5	60.4	109.9	46.1	71	57.3	<b>57</b>
Fall CPUE Substock	9.3	6.8	28.7	26.6	5.5	6.7	20.3	10.4	9.3	4.2	<b>10.6</b>
Fall CPUE>Stock	46.9	28.7	27.4	64.7	58	53.6	89.6	35.7	61.8	53.1	<b>46</b>
<b>Stocking (Florida LMB)</b>											
Harmon Creek											
# per Acre	70	--	--	--	--	--	--	--	--	--	
Total No.	35,000	--	--	--	--	--	--	--	--	--	<b>39,800</b>
<b>Growth</b>											
Mean TL at Age-1	165	--	--	--	156	182	--		--	--	<b>167</b>
Mean TL at Age-3	339	--	--	--	--	334	--		--	--	<b>339</b>
<b>Relative Weight</b>											
Stock	94	95	105	92	98	98	96	91	88	93	<b>96</b>
Quality	88	94	95	93	89	89	93	88	86	88	<b>91</b>
Preferred	92	96	97	93	98	88	93	89	90	86	<b>93</b>
Memorable	108	99	98	95	98	90	88	93	90	82	<b>96</b>
Trophy	--	--	--	--	--	--	--	--	--		
<b>Mortality</b>											
Total Mortality		44%				44%		--	--		
		r2=78				r2=64					
<b>Fishing Success</b>											
Catch Rate	0.95	0.92	0.69	2.11	1.52	1.81	1.52	1.32	1.61	1.06	<b>1.2</b>
Harvest Rate	0.14	0.16	0.18	0.2	0.16	0.19	0.15	0.13	0.1	0.13	<b>0.16</b>
% Released	85	90	93	97	95	94	94	96	94	90	<b>91</b>
Mean Weight	2.49	2.61	2.75	2.65	2.8	2.31	2.5	2.44	2.63	2.59	<b>2.55</b>

## FISHERY FORECAST

Recruitment has been fair to good in fourteen of the last sixteen years (2004, 2011 poor) following poor years in four of the previous seven years. Catch rates increased in and catch rates with electrofishing gear have remained  $\geq 60$  fish/hour since 1998. In addition, densities of memorable size fish are comparable to densities observed in the early and mid 1990's. The decline of preferred size fish in the late 1990's to early 2000 was attributed to poor recruitment in the early 1990's (failures in 5 of 8 years). Largemouth bass fishing on Kentucky Reservoir should be excellent for the next several years.

Fall sampling showed poor W<sub>r</sub> of measured fish. W<sub>r</sub>'s have been below average in the last three years – this data will continue to be monitored. YOY LMB CPUE declined below historic levels. Although Fall CPUE declined, data was comparable to historical fall rates and the length frequency distributions were similar to Spring levels.

Every five years, electrofishing sampling (2.0 hours – 8 sites) is conducted south of Beech River to Pickwick Dam. In 2010, 22 largemouth bass (11.0/hour – RSD15 = 28), 38 bluegill (19.0/hour – RSD8 = 3), 16 redear sunfish (8.0/hour – RSD9 = 0), and 13 spotted bass (6.5/hour – RSD15 = 0) were collected. White (n=8) and Black crappie (n=4) were also collected. Densities were low and populations have not improved since 2005.

Largemouth bass were the second most sought species by anglers. Fishing pressure was higher than seen from 2000 – 2008; catch rates by anglers seeking largemouth bass remained high. Creel data showed the fishing pressure was slightly higher in the northern section (74% northern section) and catch rates for black bass were higher in the northern section (1.22- to 0.93/hour catch rate). The length frequency distribution showed the majority of the largemouth bass harvested were < 400mm (65%) and anglers continue to release over 90% of largemouth bass caught.

According to the BITE information, number of anglers reporting tournament activity from Kentucky Reservoir has declined dramatically the last several years with no tournaments reporting in 2013.

Electrofishing catch rates varied in each section of the reservoir and each section experienced fall catch rates above 60 fish/hour (Section I: 75/hour; Section II: 116.5.0/hour; Section III: 74.0/hour); recruitment was  $\geq 10$  fish/hour in each section. Preferred sizes (RSD15) remained above acceptable levels in each section.

Anglers seeking black bass spent \$7.42 per hour seeking bass and were willing to spend an additional 49% to fish for bass on Kentucky Reservoir. The total value of the bass fishery was \$4,248,350.

## MANAGEMENT RECOMMENDATIONS:

Continue with the 15-inch minimum size limit and the 5 fish per day aggregate creel limit.

## Smallmouth Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Spring Electro Hours</b>	6	6	6	6	6	6	6	6	6	6	6
<b>Fall Electro Hours</b>	4.96	6.74	8.96	7.71	7.89	6.68	4.08	8.02	7.3	6.79	6.3
<b>Recruitment</b>											
Age-1 CPUE	--	--	--	--	--	--	--	--	--	--	--
Substock CPUE	1	0.3	0.2	--	0	1.8	0.7	2.3	0.2	1.3	0.6
<b>Spring Density (n)</b>	10	5	9		2	17	10	29	3	24	8
PSD	100	67	25	43	50	50	50	57	80	44	63
RSD Preferred	--	33	25	29	50	50	50	29	--	38	46
CPUE	1.7	0.8	1.5	1.7	0.3	2.8	1.7	4.7	0.5	4	1.4
CPUE ≥ Stock	0.7	0.5	1.2	1.7	0.3	1	1	2.3	0.3	2.7	0.9
CPUE ≥ Preferred	--	0.2	--	0.5	0.2	0.5	0.5	0.7	0	1.7	0.4
CPUE ≥ MSL (15")	--	0.2	--	0.5	0	0.5	0.5	0.7	0	1.7	0.3
<b>Fall Density (n)</b>	4	3	7	10	3	1	5	7	17	12	4
Fall Total CPUE	0.8	0.3	0.8	1.3	0.5	--	0.9	0.7	1.7	1.8	0.6
Fall CPUE Substock	0.6	--	0.3	0.4	0.1	--	0.7	0.4	0.4	1	0.5
Fall CPUE>Stock	0.2	0.3	0.5	0.9	0.4	--	0.2	0.3	1.3	0.8	0.5
Fall CPUE > P	--	0.1	0.1	0.3	0	--	0	0	0.1	0.2	0.2
<b>Growth</b>											
Mean TL at Age-1	--	--	--	--	--	--	--	--	--	--	--
Mean TL at Age-3	--	--	--	--	--	--	--	--	--	--	--
<b>Mortality</b>											
Total Mortality	--	--	--	--	--	--	--	--	--	--	--
<b>Relative Weight (Fall)</b>											
Stock	98	--	83	106	90	--	--	84	83	86	92
Quality	--	92	89	94	--	--	83	--	68	80	92
Preferred	--	86	--	88	--	--	--	--	72	--	91
Memorable	--	--	--	99	--	--	--	--	--	70	99
Trophy	--	--	--	--	--	--	--	--	--	--	--
<b>Fishing Success (Smallmouth only)</b>											
Catch Rate	0.19	--	--	0	0.65	0	0	1.09	0.13	0.02	0.3
Harvest Rate	0.04	--	--	0.0	0	0	0	0	0	0	<0.01
% Released	80	92	--	99	80	0	0	95	90	85	64
Mean Weight	6.33	3.73	--	3.7	2.15	0	0	2.35	3.96	4.29	2.8

## FISHERY FORECAST

The density of smallmouth bass remains low in Kentucky Reservoir, although quality fish have been caught during tournaments. Only 24 and 12 smallmouth bass were collected during Spring and Fall sampling, respectively.

Smallmouth bass electrofishing catch rates are very low on Kentucky Reservoir (usually less than 10 fish collected lakewide). In addition, historical creel survey data has shown smallmouth bass harvest to be less than 0.04 fish/hour and catch and release to be less than 0.2 fish/hour. Percent effort (those anglers seeking smallmouth bass) has consistently been below 3%. These data reflect a low density smallmouth bass population and a black bass population dominated by largemouth bass.

## MANAGEMENT RECOMMENDATIONS

No recommendations.

## Spotted Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Spring Electro Hours</b>	6	6	6	6	6	6	6	6	6	6	<b>6</b>
<b>Fall Electro Hours</b>	4.96	6.74	8.96	7.71	7.89	6.68	4.08	8.02	7.3	6.79	<b>6.3</b>
<b>Recruitment</b>											
Age-1 CPUE	--	--	--	--	--	--	--	--	--	--	
Substock CPUE	--	--	--	--	0.7	0.3	0.7	2.2	0	0.1.0	<b>0.5</b>
<b>Spring Density (n)</b>	41	51	56	32	28	36	49	34	5	43	
PSD	0	100	57	80	46	41	84	71	80	33	<b>53</b>
RSD Preferred	--	33	--	30	25	6	31	24	0	3	<b>28</b>
CPUE	6.8	8.5	9.3	5.3	4.7	6	8.2	5.7	0.8	7.2	<b>8</b>
CPUE ≥ Stock	5.8	8.2	8.3	5	4	5.7	7.5	3.5	0.8	6.7	<b>7.2</b>
CPUE ≥ Preferred	1.5	0.5	2	1	1	0.3	2.3	0.8	0	0.2	<b>1.3</b>
<b>Fall Density (n)</b>	36	16	49	33	11	11	14	31	17	8	<b>28</b>
Fall total CPUE	6.8	2.6	5.6	3.5	1.3	2.3	2.9	3.6	2.6	1.2	<b>4.7</b>
Fall CPUE Substock	2.4	0.7	1.1	0.5	0.3	0.8	2.1	1.3	0.4	0.5	<b>1.4</b>
Fall CPUE ≥ Stock	4.4	1.9	4.5	3	1	1.5	0.9	2.3	2.3	0.7	<b>3.4</b>
Fall CPUE > P	--	--	0.7	0.2	0	0	0	0.1	0	0	<b>0.4</b>
<b>Relative Weight (Fall)</b>											
Stock	107	104	115	91	99	98	104	--	94	148	<b>101</b>
Quality	87	99	94	88	95	89	96	82	73	99	<b>93</b>
Preferred	--	--	101	100	--	--	--	91		--	<b>100</b>
Memorable	--	--	--	--	--	--	--	--		--	<b>97</b>
Trophy	--	--	--	--	--	--	--	--		--	
<b>Fishing Success (Spotted bass only)</b>											
Relative Catch Rate	0.07	0.07	0.19	0.17	0.04	0.01	0.04	0.1	0.06	0.05	<b>0.08</b>
Relative Harvest Rate	0.01	0.01	0.04	0.02	0.01	0	0.01	0.01	0	0	<b>0.01</b>
% Released	81	87	76	87	80	0	--	92	89	88	<b>68</b>
Mean Weight	1.02	1.23	1.59	1.21	0.96	0	--	1.2	0.94	1.1	<b>1</b>

## White Crappie

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment (Trap Net Survey)</b>											
Age-0 CPUE	--	3.6	5	3.8	4.4	11	0.3	--	--	--	<b>5.3</b>
Substock CPUE	5.1	3.4	4.8	3.4	4	11.9	1.4	4.9	7.4	13.3	<b>5.5</b>
Total CPUE	8.8	6.8	6.5	4.5	4.5	13.4	2.9	6.4	8.7	14.5	<b>7.4</b>
Net Nights	112	112	110	112	111	111	112	111	112	112	<b>110</b>
n	982	766	461	508	500	1,483	329	707	971	1,625	<b>787</b>
<b>Fall Density (Electrofishing Survey)</b>											
PSD	91	92	84	91	91	92	80	94	95	95	<b>90</b>
RSD-P	62	95	97	64	63	78	50	53	77	72	<b>69</b>
CPUE	49.3	53.5	58.9	43.9	43.7	47.3	72.1	63.1	63.3	40.5	<b>44</b>
CPUE ≥ Stock	49.2	53.3	58.7	43.9	42.9	45.7	71.8	62.5	63	40.5	<b>45</b>
CPUE ≥ MSL (10")	26.1	20.1	30.9	39.3	25.7	34.9	37.4	32.8	48.2	28.7	<b>24</b>
n	236	301	461	364	366	355	279	525	971	304	<b>287</b>
Fall Hours	4.96	6.74	8.96	7.71	7.89	6.68	4.08	8.02	7.3	6.79	<b>6.3</b>
<b>Growth (Fall)</b>											
Mean TL at Age-0	88	85	81	77	79		129	--	--	--	<b>83</b>
Mean TL at Age-2	248	269	--	--	--		159	--	--	--	<b>259</b>
<b>Mortality</b>											
Total Mortality		53%	--	--	--		53%	--	--	--	
		r2=0.55					r2=0.97				
<b>Relative Weight (Fall)</b>											
Stock	97	108	133	101	127	117	137	100	120	113	<b>107</b>
Quality	103	103	109	105	110	109	108	102	103	106	<b>103</b>
Preferred	105	98	103	99	106	105	100	98	101	97	<b>100</b>
Memorable	93	98	98	97	103	109	95	89	95	96	<b>97</b>
Trophy	--	--	--	--	--	--	--	--	--	--	
<b>Angling Pressure (Angler Hours per Acre)</b>											
All Crappie	6.1	6.2	5.9	6.04	6.1	5.1	4.1	4.41	4.56	3.58	<b>5.9</b>
<b>Fishing Success</b>											
Crappie Catch Rate	2.43	2.55	2.72	2.59	2.16	2.85	2.07	2.58	2.02	1.95	<b>2.4</b>
Crappie Harvest	1.2	1.26	1.49	1.67	1.23	1.57	1.03	0.77	1.02	0.92	<b>1.2</b>
WC % Released	50	52	46	41	47	44	49	74	49	53	<b>48</b>
WC Mean Weight	0.73	0.73	0.71	0.75	0.69	0.69	0.73	0.85	0.78	0.8	<b>0.74</b>
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
All Crappie	1,944	1,560	1,454	2,008	2,678	1,342	2,073	2,515	3,080.10	1,804.60	<b>1,708</b>

## FISHERY FORECAST

Although white crappie have experienced erratic recruitment since 2000, the white crappie population remained high quality and electrofishing densities were comparable to historic levels; preferred size fish CPUE remained above the 10-year average. Total CPUE of white crappie increased from 2002 – 2007 but declined in 2008 and 2009 and was attributable to low recruitment in four of the last eight years. The Tennessee valley experienced drought conditions during 2007, 2008, June through December, 2010, and the summer of 2011 and 2012. However, water levels were higher than normal in Spring 2010 and 2011, and crappie apparently experienced good reproduction and recruitment due to higher, more stable water levels in 2010. However, recruitment did not mirror that scenario with similar conditions in 2011. Under similar drought conditions in 1984 – 1988, crappie experienced poor recruitment and crappie fishing declined from 1989 – 1992. CPUE of YOY white crappie in trap net surveys was 3.4, 12.4, and 26.8 in sections I, II, and III, respectively. Acceptable YOY/NN levels in sections I, II, and III were 2.0, 5.0, and 10.0, respectively.

Black crappie densities have been comparable to white crappie trap net densities since 2000 and densities have been highest in the most northern section (86% in 2011; 83% in 2012; 74% in 2013; 59% in 2014). In Sections 1, 2 and 3, black crappie comprised 78-, 22- and 50% of crappie collected during 2014 fall electrofishing surveys, respectively. Black crappie comprised 37% of the crappie caught by anglers.

Crappie were the most sought species on Kentucky Reservoir and catch rates by anglers have remained above 2.0 fish/hour in 9 of the last 11 years; mean weight of white crappie harvested has also remained above 0.75 pounds during the last three years. However, the poor 2011 year class negatively impacted angler harvest rates in 2014 and the poor recruitment in the most northern section (< 2.0 in four of the last six years) will negatively impact angler harvest rates in the Big Sandy area.

Sampling surveys showed the catch rate of crappie  $\geq$  10-inches have decreased but remained above the 10-year average. Trap netting surveys showed over-all average recruitment of young-of-year white crappie has been acceptable in the 21<sup>st</sup> century. However, sectional comparisons showed white crappie recruitment (YOY) was lowest in the two most northern section (Section 1: 3.4/net night; Section 2: 12.4/net night), and acceptable in section 3 (26.8/net night) (acceptable levels: SI-2.0; SII-5.0; SIII-10.0). CPUE of YOY white crappie has declined below historical levels in seven of the last thirteen years in the most southern section (2005, 2007, 2010, 2012 - good) and four of the last six years in the most northern section. Although crappie electrofishing catch rates declined as sampling progressed downstream, the decline may be attributed to availability of cover at reduced water levels and not actual population density.

Black crappie densities have appeared to stabilize, and relative catch rates showed a catch and harvest rate of 0.79- and 0.44/hr, respectively. The majority of the fishing pressure for crappie was in the northern section (81%) and lakewide fishing pressure has declined slightly with the improved bass fishing since 2009. The mean length of white and black crappie harvested by anglers in 2012 was 11.3- and 10.9-inches, respectively.

Anglers fishing for crappie spent \$3.58 per hour fishing for crappie and were willing to spend an additional 74% to fish for crappie on Kentucky Reservoir. The total value of the fishery was estimated at \$3,080,770. Anglers seeking crappie in the northern and the southern section of the reservoir spent \$3.43- and \$4.31 per hour fishing for crappie, respectively.

## Black Crappie

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment (Trap Net Survey)</b>											
Age-0 CPUE	--	1.3	1.1	0.7	1.5	5	0.7	--	--	--	<b>1.9</b>
Substock CPUE	1.7	1.4	1.1	0.7	1.4	5.2	0.9	0.8	1.9	3.4	<b>2</b>
Total CPUE	5.4	5.4	4.4	2.9	3.6	8	5.4	3.2	5	5.8	<b>5.6</b>
Net Nights	112	112	110	112	111	111	112	111	112	112	<b>111</b>
n	605	602	486	320	402	882	606	353	556	651	<b>616</b>
<b>Fall Density (Electrofishing Survey)</b>											
PSD	57	87	94	93	86	82	64	74	92	68	<b>79</b>
RSD Preferred	26	43	54	64	63	54	28	35	44	36	<b>46</b>
CPUE	46.7	24	38	48.0	21.3	23.7	58.6	32.4	29.8	58.4	<b>30.9</b>
CPUE ≥ Stock	46.4	23.8	38	48.0	20.9	22.8	57.5	31.5	27.5	58.1	<b>30.6</b>
CPUE ≥ MSL (10")	14.6	10.5	20.2	31.1	13.5	11.8	16.4	9.9	13.4	20.5	<b>13.7</b>
n	256	231	416	330	131	184	240	285	246	334	<b>227</b>
Fall Hours	4.96	6.74	8.96	7.71	7.89	6.68	4.08	8.02	7.3	6.79	<b>6.3</b>
% BC vs. WC	52	43	47	48	26	34	46	34	38	52	<b>44</b>
<b>Growth (Fall)</b>											
Mean TL at Age-1	78	79	73	80		99	--	--		--	<b>78</b>
Mean TL at Age-2	248	--	--	--		232	--	--		--	<b>244</b>
<b>Mortality</b>											
Total Mortality	35% r2=57	--	--	--		58% r2=0.96	--	--		--	
<b>Relative Weight (Fall)</b>											
Stock	100	94	97	97	116	102	102	98	91	111	<b>100</b>
Quality	99	94	99	99	102	94	103	93	93	93	<b>97</b>
Preferred	100	97	97	99	102	94	103	92	91	91	<b>97</b>
Memorable	89	92	96	95	98	93	99	86	96	88	<b>94</b>
Trophy	--	--	--	--	--	--	--	--	--	--	
<b>Fishing Success (Black Crappie only)</b>											
Relative Catch Rate	0.63	0.58	0.94	1.11	0.79	1.08	2.07	0.69	0.42	0.54	<b>0.7</b>
Relative Harvest	0.32	0.31	0.51	0.76	0.44	0.59	1.03	0.28	0.23	0.26	<b>0.4</b>
BC % Harvested	47	47	47	34	48	45	49	59	41	50	<b>43</b>
BC Mn Wt	0.77	0.74	0.79	0.94	0.82	0.83	0.73	0.82	0.77	0.78	<b>0.8</b>
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
All Crappie	1,944	1,560	1,454	2,001	2,677	1,342	2,073	2,515	3,080.10	1,804.60	<b>1,708</b>

## Redear Sunfish

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment (Trap Net)</b>											
Age-1 CPUE	--	--	--	--	--	--	--	--	--	--	
Substock CPUE	1.7	2.8	12.6	1.7	0.3	0.3	0.4	7.6	2.7	18.5	2.5
Total CPUE	2.5	4.8	14.5	2.5	1	1.5	1.4	8.5	3.3	19.2	3.6
Net Nights	112	112	110	112	111	111	112	111	112	112	111
n	295	533	1,595	281	110	167	153	940	367	2,151	404
<b>Spring Density (Electrofishing Survey)</b>											
PSD	68	71	62	66	62	71	89	69	91	87	70
RSD Preferred	38	41	28	16	24	28	52	38	48	42	34
CPUE	26.2	43.7	29.3	27.5	46.2	17.3	36.3	39.2	9.8	50.2	36.5
CPUE ≥ Stock	21.3	37.8	25.2	16.7	41.5	14.8	35.3	38.5	9.7	43.7	31.2
CPUE ≥ Preferred	8	15.5	7.2	2.7	9.8	4.2	18.5	14.5	4.7	21.2	10.2
n	179	259	176	165	277	104	218	235	59	301	215
Spring Hours	6	6	6	6	6	6	6	6	6	6	6
<b>Growth</b>											
Mean TL at Age-1	--	--	--	--	--	--	--	--	--	--	
Mean TL at Age-3	--	--	--	--	--	--	--	--	--	--	
<b>Mortality</b>											
Total Mortality									--		
<b>Angling Pressure (Angler Hours per Acre)</b>											
Sunfish	0.42	0.46	0.39	0.57	0.4	0.3	0.59	0.66	0.69	0.42	0.5
<b>Fishing Success (Redear Sunfish only)</b>											
Relative Catch Rate	0.65	0.62	0.95	0.85	0.2	0.65	0.5	0.52	0.27	0.41	0.65
Relative Harvest Rate	0.54	0.35	0.64	0.53	0.17	0.48	0.38	0.31	0.23	0.3	0.5
Redear Mean Weight	0.56	0.48	0.52	0.51	0.42	0.47	0.51	0.66	0.48	35	0.5
Redear % Released	24	39	30	32	24	34	24	37	27	0.42	27
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
Sunfish	109.2	119.8	112.9	168.6	111.3	60.4	179.6	327.9	212.3	193	116

## FISHERY FORECAST

Angler redear sunfish catch and harvest rates have been inconsistent from year to year on Kentucky Reservoir and showed a moderate decline since 2001. This trend along with increased sunfish fishing pressure since 1999 and a slight decline in CPUE through electrofishing surveys have resulted in management concerns for redear sunfish. Redear sunfish have the potential to be over-harvested due to concentration of their spawning areas. Once these areas have been located anglers tend to harvest the majority of the fish caught and can negatively impact populations in specific areas. Since the redear population on Kentucky Reservoir has recently become popular and redear sunfish are not multiple spawners, the species was prone to over-harvest. Since 2003 the angler harvest of redear sunfish has declined every year in the northern section of Kentucky Reservoir following the boom year of 2000 (5.8 redear sunfish harvested per hour). As expected by anglers, over 79% of the redear sunfish were caught in the northern section and relative catch rates were higher in the southern section (0.48- vs 0.61).

Redear densities were similar to historic data and sub-stock CPUE increased during trap net surveys. The CPUE of preferred size fish has also increased above the 10-year average during two of the last three years. Catch rates were variable in the three sections (Section I: 34/hour and RSD9 - 66%; Section II: 81.0/hour and RSD9 - 44%; Section III: 35.5/hour and RSD9 - 14%).

The trip expenditure data were the same as for bluegill.



**MANAGEMENT RECOMMENDATIONS:**

Provide redear sunfish information to the angler and media to increase opportunity for this species. The 30 fish creel limit for redear sunfish implemented in 2008 was reduced to a 20 fish creel limit in 2013.

**Bluegill**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment (Trap Net)</b>											
Age-1 CPUE	--	--	--	--	--	--	--	--	--	--	
Substock CPUE	5.1	10.5	18.1	4.3	2.9	5.2	3.5	13.6	11.4	11.8	<b>6.3</b>
Total CPUE	8.5	17.2	29.4	9.7	7.7	8.1	7.4	20.7	15.9	20.7	<b>12.9</b>
Net Nights	112	112	110	112	111	111	112	111	112	112	<b>111</b>
n	946	1926	3233	1086	852	901	827	2,299	1,775	2,318	<b>1,421</b>
<b>Spring Density (Electrofishing Survey)</b>											
PSD	38	32	30	29	36	40	54	46	53	47	<b>39</b>
RSD Preferred	2	2	2	5	3	2	6	6	11	5	<b>3</b>
CPUE	72.2	89.5	133.5	159.7	121	89.7	97.2	76.7	40.3	113.5	<b>97.6</b>
CPUE ≥ Stock	61	76	111	115	118.2	83	89.8	74.8	38	109.8	<b>84.9</b>
CPUE ≥ Preferred	1.5	1.5	2.2	5.3	4	1.8	5.2	4.2	4	5.5	<b>2.4</b>
n	433	537	801	958	726	538	583	460	242	681	<b>589</b>
Spring Hours	6	6	6	6	6	6	6	6	6	6	<b>6</b>
<b>Angling Pressure (Angler Hours per Acre)</b>											
Sunfish	0.53	0.42	0.46	0.39	0.57	0.3	0.59	0.66	0.69	0.42	<b>0.6</b>
<b>Fishing Success (Bluegill only)</b>											
Relative Catch Rate	3.75	3.6	3.27	6.29	5.28	6.85	4.36	3.01	2.75	3.57	<b>5</b>
Relative Harvest Rate	2.28	1.88	1.75	3.70	2.99	4.03	3.05	1.36	2.07	1.83	<b>2.9</b>
Mean Weight	0.25	0.31	0.27	0.28	0.25	0.27	0.38	0.4	0.43	0.44	<b>0.3</b>
Percent Released	56	55	57	41	56	54	44	61	40	58	<b>49</b>
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
Bluegill	109.2	119.8	112.9	168.6	111.3	60.4	179.6	327.9	212.3	193	<b>116</b>

**FISHERY FORECAST:**

Historically the bluegill fishery has been typical of bluegill fisheries seen in other west Tennessee reservoirs. Catch rates were high but fish quality was low. In 2011 through 2014, RSD8 was the highest recorded although catch rates declined (cooler temps). However, the CPUE for bluegill with electrofishing gear was not representative of the population density. Bluegill comprised 90% of the estimated sunfish caught by anglers and the majority of the fishing pressure occurred in the northern section (80%). Sunfish catch and harvest rates were higher in the northern section (northern: 4.59 and 2.13 compared to southern: 2.19 and 0.85).

Anglers spent \$3.10 per hour fishing for sunfish and were willing to spend an additional 38% fishing for sunfish on Kentucky Reservoir. The total value of the sunfish fishery was estimated at \$193,000.

**MANAGEMENT RECOMMENDATIONS:**

No recommendations are necessary.

## Sauger

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment (Gillnet)</b>		<b>PW/Duck</b>			<b>PW/Duck</b>	<b>PW/Duck</b>					
Age-1 CPUE	NS	0.1/0.2	--	1.4	2.5/0	1.1/0.1	4.6	0.2	1.52	26.6	2.5/0.1
Substock CPUE		0/0	0	0	0.1/0.0	0.0/0	0	0	0	0	2.5
Net Hours		19.30/13.1	15.3	22.5	17.8/71.7	9.6/42.8	30.2	10	5.25	5.1	111
n		78/60	124	64	114/94	89/53	154	31	40	191	404
<b>Density</b>											
PSD	--	95	84	69	54/89	87/94	--	--	-	40	73/92
RSD Preferred	--	15	11	14	19/69	34/40	--	--	--	22	15/54
CPUE	--	4.8/2.3	8.1	2.9	6.0/1.3	9.0/1.3	4.9	3.2	9.4	37.6	8/1.6
CPUE ≥ Stock	--	4.8/2.3	8.1	2.9	5.9/1.3	9.0/1.3	4.9	3.2	9.4	37.6	7.4/1.6
CPUE ≥ MSL-14" 15" 2014	--	1.6/1.3	2.8	0.9	2.6/1.1	5.9/1.0	0.2	0.6	1.9	5.2	2.7/1.1
<b>Growth</b>											
Mean TL at Age-1	--	286/267	298	298	274/270	279/290	273	276	295	281	284/276
Mean TL at Age-3	--	423/380	394	394	396/396	367/415	384	480	381	366	390/397
Mean TL at Age 5	--	--	--	--	--/372	447/413	--	--	--	--	440/393
<b>Mortality</b>											
Total Mortality	--			69% r2:92		69%/24% r2:75/ r2:26	83% r2=0.79	63% r2=0.4	--	70% R2=0.96	
<b>Wr (Winter)</b>											
Stock	--	110	101	87	100/94	97/92	90	89	--	--	96/93
Quality	--	95	99	93	96/100	96/101	99	100	--	--	96/101
Preferred	--	95	96	94	97/100	102/94	106	107	--	--	97/97
Memorable											
Trophy											
<b>Angling Pressure (Angler Hours/Acre)</b>											
Sauger	1.33	1.2	0.9	1.17	0.91	0.7	0.07	0.65	0.11	0.24	1.0
<b>Fishing Success (Redear Sunfish only)</b>											
Catch Rate	1.64	0.92	1.28	0.48	0.71	0.6	0.33	0.57	0.57	0.58	0.79
Harvest Rate	0.66	0.3	0.48	0.21	0.32	0.31	0.19	0.38	0.2	0.18	0.4
Mean Weight	1.33	1.27	1.27	1.29	1.5	1.34	1.18	1.21	1.65	1.46	1.3
% Released	69	63	57	60	58	45	63	32	68	71	27
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
Sauger	200	385	233	365	300	281	44.5	417.9	171.8	286.6	274

## FISHERY FORECAST

The sauger fishery provided winter fishing opportunity for anglers and the population continued to persevere, regardless of fishing pressure, discharge, or water levels. Fishing pressure appeared to be low, however the majority of that fishing pressure occurred in the area below the dam. In addition, a large percentage of the sauger population migrated below the dam to spawn. The fact high fishing pressure and the sauger population occur in the same area resulted in high total mortality rates seen with this population (average 72% in the last 10 years). Recruitment increased in 2014 and exceeded the 10-year average. Possibly due to stocking sauger in 2013. The CPUE of stock size fish was acceptable and the catch rate of fish  $\geq$  15-inches was the highest seen in the 21<sup>st</sup> century.

Creel data revealed that the majority of the sauger were harvested as they reached the minimum size limit (in 2006, 9% of the sauger measured were less than 14-inches). Catch rates increased slightly in 2012-2014, but remained below historic levels. Over 96% of the total fishing pressure was in the southern section and harvest rates were higher in the southern section (southern section 0.63; northern section 0.10 fish/hour); percent effort was greater in the southern section (7% vs. <1%). Larger fish were harvested by anglers in the northern section (1.46- vs. 1.53 pounds mean weight).

Genetic analysis was conducted on Kentucky Reservoir in 2006 to determine if genetic differences existed between the sauger population at Pickwick and the sauger population at Duck River. Creel data has shown that sauger harvested at Duck River were larger than those harvested at Pickwick. Electrophoretic results showed very little variation between the two populations. In fact there was little variation between the sauger populations sampled in other Tennessee reservoirs. The size differences harvested by anglers were attributed to lower fishing pressure and increased numbers of larger sauger in the Duck River area.

Anglers spent \$6.35 per hour fishing for sauger and were willing to spend an additional 73% to fish for sauger on Kentucky Reservoir. The total value of the sauger fishery was estimated at \$286,620.

## MANAGEMENT RECOMMENDATIONS

Sauger fishing has been poor over the last several years with low recruitment and low densities of adult fish. However, the angler viewpoint of the sauger fishery is still positive as indicated by the willingness to spend over \$6.00 to fish for sauger and spend an additional 73% to fish for sauger.

A 15-inch minimum size limit with a 10 fish per day creel limit was implemented on March 1, 2014.. Increasing the size limit will increase the protection of spawning females from 14% at 14" to 31% at 15". The increased protection for adult females may help improve survival and recruitment of age 1 fish into the population. In addition, over 120,000 sauger were stocked below Pickwick Dam in 2013. However, without a minimum size limit, the sauger fishery would be non-existent in Kentucky Reservoir.

## Blue Catfish

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment (Gillnet Survey)</b>											
	PW/Duck										
Age-1 CPUE	--	--	--	--	--	--	--	--	--	--	
Substock CPUE	--	--	--	--	0.3	0.3/0.0	--	0.1	--	--	<b>0.3/0</b>
Net Hours	--	19.3	15.3	22.5	89.5	9.6/42.8	30.2	10	--	5.1	<b>23.3</b>
n	--	--	--	1	24	Mar-00	0	5	--	0	<b>10</b>
<b>Angling Pressure (Angler Hours per Acre)</b>											
Catfish	3.28	3.1	3.3	2.5	3.2	2.2	4.04	4.18	2.86	2.07	<b>3.4</b>
<b>Fishing Success</b>											
Catch Rate	0.52	0.55	0.52	0.76	0.81	1	1	1.16	1.52	1.04	<b>0.7</b>
Harvest Rate	0.39	0.46	0.41	0.60	0.69	0.79	0.73	0.72	1.13	0.8	<b>0.6</b>
% Released	26	26	34	28	22	25	32	36	24	24	<b>23</b>
Mean Weight	2.05	2.24	1.92	2.24	2.53	1.42	2.06	2.36	2.3	2.01	<b>2.2</b>
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
Catfish	509	605	594	597	866	455	1,500	1,797	2,177.8	974.5	<b>626</b>

## FISHERY FORECAST

The forecast for the catfish fishery remained good with catch rates increasing over historic data. Angler pressure continued to be high and catch rates remained acceptable. Over 56% of the catfish caught were blue catfish, followed by channel catfish (43%) and flathead catfish (<1%). The majority of the catfish pressure was in the southern section (51%), and catch rates were similar between sections (all catfish – 1.11 and 0.99 catch rate for the northern and southern section, respectively).

Anglers spent \$2.67 fishing for catfish and were willing to spend an additional 50% to fish for catfish on Kentucky Reservoir. The total value of the catfish fishery was estimated at \$974,540. Trip expenditures for the northern section and the southern section were \$2.41 and \$2.94, respectively.

## MANAGEMENT RECOMMENDATIONS

No recommendations are necessary.

## Striped Bass

	PW/Duck										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Net Hours	NS	19.3	15.3	22.5	17.7	9.6/42.8	30.2	10	5.25	5.1	14.3/43
n	NS	18	17	13	1	Jun-00	29	8	1	2	17/0
<b>Recruitment (Gillnet Survey)</b>											
Substock CPUE	--	0.5	0.1	0.2	--	0.6/0	0	0.1	--	--	1.1
Age1 CPUE	--	0.5			--	0.8		--	--	--	2.3/0
<b>Density</b>											
PSD	--	--	--	100	--	--		--		--	60
RSD Preferred	--	--	--	0	--	--		--		--	0
CPUE	--	1	1.2	0.5	--	0.8/0	1	0.8		--	1.7/0
CPUE ≥ Stock	--	--	1.2	-	--	0.1/0	1	0.7		--	1.2
CPUE ≥ MSL (15")	--	--	--	--	--	0/0	0	0		--	
<b>Growth</b>											
Mean TL at Age-1	--	285	--	--	291	271		--		--	277
Mean TL at Age-3	--	512	--	--	--	--		--		--	524
<b>Mortality</b>											
Total Mortality	--		--	--	--			--		--	
<b>Angling Pressure (Angler Hours per Acre)</b>											
Striped Bass	0.18	<0.1	0.13	<0.1	0.3	0.08	0.03	0.05	0.2	<0.1	0.16
<b>Fishing Success (Striped Bass only)</b>											
Catch Rate	0.53	0.21	0.17	0.33	0.62	0.59	0.58	0.14	0.02	0.27	0.38
Harvest Rate	0.33	0.1	0.06	0.21	0.16	0.42	0.33	0	0	0.04	0.16
Mean Weight	7.54	7.03	10.8	6.56	10.96	7.8	4.4	3.9	5.05	2.96	6.9
Percent released	54	54	69	42	75	43	51	81	80	80	65
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
Striped Bass	30.4	22.1	24.7	13.5	74.5	15	24.9	13	14.4	16.6	26

## FISHERY FORECAST

The fishery for striped bass and Cherokee Bass were dependent upon either natural reproduction or migration from other waters stocked with these species. Striped bass or Cherokee Bass have not been stocked in Kentucky Reservoir since the late 1980's. Striped bass apparently produced a good year class in 2002 with good densities of age 1 fish in the population in 2003 and over 4 fish collected per hour in winter surveys, 2004. The majority of striped bass collected in 2011 were stock indicating a successful spawn in 2010.

## MANAGEMENT RECOMMENDATIONS

No recommendations are necessary.

## Hybrid Striped Bass

	PW/Duck										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Net Hours	--	19.3	15.3	22.5	17.8	9.6/42.8	30.2	10	5.25	5.1	13.03
n	--	0	1	5	0	0/0	0	2	1	0	6.4
Recruitment (Gillnet Survey)											
Substock CPUE	--	--	--	--	--	--	--	--	--	--	0
Density											
PSD	--	--	--	--	--	--	--		--	--	--
RSD Preferred	--	--	--	--	--	--	--		--	--	--
CPUE	--	0	0.6	0.2	--	--		--	--		0.6
CPUE ≥ Stock	--	--	--	--	--	--	--		--	--	1.4
CPUE ≥ MSL (15")	--	--	--	--	--	--	--		--	--	1.2
Growth											
Mean TL at Age-2	--	--	--	--	407	--	--	--	--	--	
Mortality											
Total Mortality										--	
Angling Pressure (Angler Hours per Acre)											
Hybrid Striped Bass	--	--	--	--	--	--	--	--	--		
Fishing Success (Hybrid Striped Bass only)											
Catch Rate	--	--	--	--	--	0		--	0	0	
Harvest Rate	--	--	--	--	--	0		--	0	0	
Mean Weight	0	0	16.7	--	--	0		1.07	2.45	--	4.43
Percent released	100	100	0	--	--	0		63	33	--	59

## White Bass

	PW	PW/Duck	PW	PW	PW	PW/Duck	PW				
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Net Hours	NS	19.30/26.3	15.3	22.5	17.8	9.6/42.8	30.2	10	5.25	5.1	14.3
n	--	17/4	60	111	95	56/2	25	51	46	7	56
<b>Recruitment (Gillnet Survey)</b>											
Substock CPUE	0	--	0	0	0	0/0	0	0	0	0	0
PSD	--	81	97	96	96	100/100		100	100	71	95/100
RSD Preferred	--	57	92	37	52	79/0		86	65	57	65/0
CPUE	--	0.9	8.6	5.0	5.9	6.4/0.1	0.8	5.5	8.1	1.38	4.7/0.1
CPUE ≥ Stock	--	--/--	8.6	5	5.9	6.4/0.1	0.8	5.5	8.1	1.38	5.3/0.1
CPUE ≥ Preferred	--	--/--	7.4	2	3.1	5.1/0.1	0.4	4.9	4.9	0.78	3.5/0.1
<b>Growth</b>											
Mean TL at Age-2	--	329/	--	--	307	--		--	--	--	318
Mean TL at Age-3	--	332/	--	--	350	--		--	--	--	350
<b>Relative Weight</b>											
Stock	--	90	--	87	--	--/--	--	--	--	--	88
Quality	--	84	--	93	94	94/--	112	--	--	--	88
Preferred	--	92	--	92	99	100/107	94	--	--	--	97/107
Memorable	--	106	--	90	--	--	92	--	--	--	91
Trophy					--	--	--	--	--	--	
<b>Mortality</b>											
Total Mortality	--	--	--	--	--	--		--	--		
<b>Angling Pressure (Angler Hours per Acre)</b>											
White Bass	0.38	0.27	0.23	0.26	0.33	0.29	NA	0.18	0.13	0.19	0.30
<b>Fishing Success (White Bass only)</b>											
Catch Rate	1.72	1.98	1.2	2.09	1.72	1.64	NA	4.06	2.11	2.67	2.13
Harvest Rate	0.86	0.71	0.65	0.76	0.71	0.42	NA	2.55	1.12	1.59	1
Mean Weight	0.74	0.75	0.75	0.85	0.6	0.68	0.79	1.1	1.11	55	0.77
Percent Released	57	58	64	72	69	61	65	54	65	0.99	59
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
White Bass	29	44	54	58	82	48	NA	119.6	200.8	169.3	49

## FISHERY FORECAST

The white bass fishery was dependent on discharge and water levels at the spawning areas (usually below dams). Anglers seeking this species experienced a boom-bust type fishery and recruitment to older ages was limited. In 2013 and 2014, total CPUE exceeded historic data and preferred size fish appeared to be abundant; 97% of the fishing pressure for white bass was in the southern section. Anglers seeking this species spent \$5.08 per hour fishing for this species and were willing to spend an additional 66% to fish for the true basses on Kentucky Reservoir. The total value of the fishery was estimated at \$169,310.

## MANAGEMENT RECOMMENDATIONS

The creel limit was reduced to 15 in 2005. Work with the Tennessee Valley Authority to identify critical spawning periods of white bass and identify discharge rates and water levels necessary for successful white bass spawning and recruitment.

Continue with the 15 fish creel limit for white bass.

## Yellow Perch

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b>											
Substock CPUE									--	--	
<b>Spring Density (n)</b>				3		1					<b>5.1</b>
PSD	--	-	--	80	--	40	--	--	--		<b>40</b>
RSD Preferred	--	-	--	60	--	40	--	--	--		<b>50</b>
CPUE	--	-	--	1.1	--	1.2	--	--	--		<b>1.2</b>
CPUE $\geq$ Stock	--	-	--	0.6	--	0.8	--	--	--		<b>0.7</b>
<b>Fishing Success</b>											
Catch Rate	--	--	--	--	--	--	--	--	--	--	
Harvest Rate	--	--	--	--	--	--	--	--	--	--	
% Released	--	--	--	--	--	--	--	--	--	--	
Mean Weight	--	--	--	--	--	--	--	--	--	--	

## FISHERY FORECAST

Reports have been received that yellow perch were sought by a small percentage of anglers and larger fish were being caught in the mouth of major creeks. Report have been received that fish up to one pound have been harvested. However, the fishery is nearly non-existent in the reservoir and the majority of the fish collected during electrofishing surveys were less than 10-inches



## Gizzard Shad

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Fall Electro Hours</b>	4.96	6.74	8.96	7.71	7.89	6.68	4.08	8.02	7.3	6.79	<b>6.3</b>
<b>Recruitment</b>											
CPUE < 150 mm	1.2	2.4	21.5	2.1	24.7	68	32.6	6	17.9	9.7	<b>14.4</b>
CPUE ≥ 280 mm	3.4	3.7	5.3	0.1	4.5	31	1.6	3.6	50.4	6	<b>12.4</b>
<b>Density</b>											
Fall total CPUE	80.1	64.7	99.2	62.1	95.8	118.3	127.9	61.5	74.4	53.2	<b>82</b>
Fall CPUE Substock	30.3	18.1	62.8	25.6	43.1	87.2	66.2	14.8	24	6.4	<b>34.5</b>
Fall CPUE ≥ Stock	49.8	46.6	36.4	36.5	52.7	31	61.7	46.8	50.4	46.8	<b>48.5</b>
Fall total collected (n)	303	383	611	481	540	694	428	449	615	318	<b>432</b>

## Discussion

CPUE fell below historic levels and CPUE of gizzard shad less than 150 mm were poor. CPUE was consistent as sampling progressed upstream (46.0 -, 87.1-, and 27.0 per hour in Sections 1, 2, 3, respectively). Approximately 15-, 0-, and 48 % of the gizzard shad collected in sections 1, 2 and 3, respectively were substock.

## Threadfin Shad

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Fall Electro Hours</b>	4.96	6.74	8.96	7.71	7.89	6.68	4.08	8.02	7.3	6.79	<b>6.3</b>
<b>Density</b>											
Fall CPUE < 75 mm	96.2	45.4	73.9	96.2	18.5	62.6	121	53	47.3	46.2	<b>59.5</b>
Fall Total CPUE	183.4	96.3	117.9	97.2	48.8	67.8	133.5	108.2	108.2	55.7	<b>108</b>
Fall Total collected (n)	739	609	883	847	317	476	548	759	671	325	<b>591</b>

## Discussion

As with gizzard shad, CPUE of threadfin shad fluctuated as sampling progressed upstream (45.7-, 100.5-, and 22.7 per hour in Section 1, 2, and 3 respectively). Size distributions were similar between sections and threadfin shad were collected at preferred sizes for predators. The over-all density of threadfin shad was similar to the 10-year average.

**Other Species Collected**

<b>Species</b>	<b>Number Collected</b>	<b>Gear</b>	<b>Value</b>
Channel Catfish	7	Trap Net	0.1/net night
	21	Gill Net PWT	4.1/hour
Fathead Minnow	3	Trap Net	<0.1/NN
Flathead Catfish	3	Trap Net	<0.1/NN
Freshwater Drum	25	Trap Net	0.2/net night
	3	Gill Net PW	0.6/hour
Gizzard Shad	23	Trap Net	0.2/net night
Golden Shiner	4	Trap Net	<0.1/net night
Largemouth Bass	4	Trap net	<0.1/net night
Logperch	82	Trap Net	0.7/net night
Longear Sunfish	141	Trap Net	1.3/net night
Longnose Gar	1	Trap Net	<0.1/net night
Orangespotted Sunfish	89	Trap Net	0.8/net night
Redear Sunfish	2,151	Trap Net	19.2.net night
River Redhorse	1	Gill Net PW	0.2/hour
Silver redhorse	1	Trap net	<0.1/net night
	1	Gill Net PW	0.2/hour
Skipjack Herring	11	Gill Net PWT	0.2/hour
Spotted Bass	42	Spring Electrofishing	7.2/hour
	8	Fall Electrofishing	1.2/hour
	22	Trap net	0.2/net night
	4	Gill Net PWT	0.8/hour
Spotted Gar	4	Trap Net	<0.1/net night
Spotted Sucker	4	Trap Net	0.1/net night
Spotted Sunfish	13	Trap Net	0.11/net night
Striped Bass	2	Gill Net PWT	0.4/hour
	2	Fall Electrofishing	0.3/hour
Threadfin Shad	134	Trap Net	1.2/net night
Walleye	2	trap net	<0.1/net night
	1	Gill Net PW	0.2/hour
Warmouth	34	Trap Net	0.3/net night
White Bass	7	Gill Net PWT	1.4/hour
	2	Spring electrofishing	0.3/hour
	11	Fall electrofishing	1.6/hour
Yellow Bass	131	Trap net	1.2 /net night
	21	Gill Net PWT	4.1/hour
Yellow Bullhead	2	Trap Net	<0.1/net night
Yellow Perch	1	Spring electrofishing	0.2/hour
	2	Fall Electrofishing	0.3/hour

Trap Net = 112 NN  
Spring Electro – 6.0 hours

Gill net – 5.1 hours  
Fall Electro – 6.79 hours

## 2014 Water Quality Monitoring

The Tennessee valley experienced drought conditions in 2007, 2008 and summer – fall 2010. Drought conditions also persisted in summer, 2011 and 2012. These conditions coupled with the USACOE work on Wolf Creek Dam (Cumberland Lake) and the Center Hill Dam resulted in reduced flows through the Cumberland River system. The conditions on Barkley Reservoir also impacted Kentucky Reservoir since the two reservoirs are connected via a canal at TNRM 25.0.

In 2013, summer air temperatures were lower than historical records and water temperatures were lower than seen in previous years.

### JUNE

Dissolved oxygen levels fell below 4.0 ppm at 48' at station 1. Water temperatures fell between 26.8 and 28.7°C at the surface (warmer temps at most southern stations). Secchi disc, pH, conductivity, and alkalinity readings averaged 103 cm (2013 - 79.7 cm), 7.4 (2013-7.5), 67 umhos/cm (2 sites - 2013-124 umhos/cm two sites), and 45 mg/l (2013 - 24.8 mg/l (six sites).

### JULY

All parameters fell within acceptable levels and water temperatures varied very little between surface and bottom readings at all stations. Dissolved oxygen fell below 4.0 ppm at BSRM 6 (24'). Secchi disc, pH, conductivity, and alkalinity readings averaged 83 cm (2013-123 cm), 7.3 (2013-7.2), 171 umhos/cm (2013-125 umhos), and 46 mg/l (2013- 29 mg/l).

### AUGUST

Water temperatures varied very little between surface and bottom readings at all stations (<1°C). Dissolved oxygen levels fell below 4.0 ppm in the Big Sandy (BSRM 2.0 below 15'). Secchi disc, pH, conductivity, and alkalinity averaged, 154 cm, 7.6, 118 umhos, and 44 mg/l.

### Sampling Stations

TNRM 62.4  
BSRM 2.0  
TNRM 100.5  
TNRM 135.6  
TNRM 159.0  
TNRM 189.9

## Pickwick Reservoir - 2014

### Description

Area (acres): TN: 6,159; TOTAL: 43,100 Mean Depth (feet): 21' Shoreline (miles): Total - 496  
 Counties: Hardin Reservoir Length: TN – 6 miles; Total: 52 miles Drainage Area: 32,820 sq.mile  
 Total Fishing Effort (angler hours): 123,683 (2009) Total Value by Anglers: \$482,720 (2009)  
 Summer Pool: 414.0 MSL Winter Pool: 408.0 MSL Impounded: 1938

### Management Strategies:

**Striped Bass/Hybrid Striped Bass:** 15" MLL, 2 fish – 1987

**Crappie:** 10 fish creel limit – 1989

**Redear Sunfish:** 20 fish creel limit - 2008

9" MLL, 30 fish creel – 1997

**SMB:** 15" MLL - 2003 – 2007

**LMB:** Creel limit reduced from 10 to 5 -1997

18" MLL – 2008; 15" MLL – 2013

15" MLL, 5 fish creel – 2003

**Sauger:** 15" MLL, 15 fish creel – 1998

**White Bass:** 30 fish creel limit - 1989

15" MLL, 10 fish creel - 2001

Creel limit reduced to 15 - 2005

### Habitat Enhancement and Monitoring

2013 - None.

#### Angling Pressure (Angler Hours per Acre)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Total Angler Pressure	11.4	13.9	19	11	20.1	NA	NA	NA	14.7	18	14.5
Black Bass (LMB,SPB)	5.5	6.37	9.23	5.4	7.8	NA	NA	NA	7.5	13	8.3
Smallmouth	0.9	0.5	0.1	0	0	NA	NA	NA	NA	0.04	2
Tournaments <sup>BITE</sup>	29	31	32	0	50	0	0	0			26
Lbs/Angler Day <sup>BITE</sup>	4	3.4	4.6	0	7.97	--	--	--			4.6
Fish/Angler Day <sup>BITE</sup>	1.7	1.6	2.2	0	3.43	--	--	--			2.2
Angler Hours <sup>CREEL</sup>											
Catch Rate <sup>CREEL</sup>											

#### Value of Fishery (Trip Expenditures in Thousands)

Black Bass (LMB,SPB)	137.2	161	303.3	288.3	359.9	NA	NA	NA	1,176	768.7	214
Smallmouth	22	12.5	0.3	0.0	0	NA	NA	NA	NA	2	30

## Largemouth Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Spring Electro Hours</b>	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	<b>1.6</b>
<b>Fall Electro Hours</b>	1.57	1.73	2.88	2.05	1.51	0.73	1.17	0.88	1.69	2.53	<b>1.7</b>
<b>Recruitment</b>											
Age-1 CPUE	--	21.4	19.7	--	--	55.3	17.7	--	--	--	<b>29</b>
Substock CPUE	92.9	21.3	24.7	26.7	42.7	38	11.3	16.7	19.3	27.3	<b>33</b>
<b>Spring Density (n)</b>	257	130	109	166	214	228	167	113	173	171	<b>171</b>
PSD	40	35	78	72	64	66	85	81	74	74	<b>68</b>
RSD Preferred	8	12	21	24	19	25	31	30	27	28	<b>22</b>
CPUE	171.3	86.7	72.7	111.3	142.7	152	111.3	75.3	115.3	114	<b>113</b>
CPUE ≥ Stock	79.3	65.4	48	84.7	100	131.8	100	58.7	96	86.7	<b>85</b>
CPUE ≥ MSL (15")	6.7	8	10	20.0	19.3	34.8	31.3	18	26	40	<b>19</b>
<b>Fall Density (n)</b>	191	106	114	163	168	129	131	122	178	171	<b>147</b>
Fall Total CPUE	124.3	69.3	39.6	79.3	131.5	163.4	114.1	121.8	157.2	112.9	<b>111</b>
Fall CPUE Substock	33.9	28.9	20	47.7	39	38.7	25.5	5.3	33.7	12.2	<b>29</b>
Fall CPUE>Stock	90.4	40.4	19.6	31.6	92.5	124.7	88.6	116.5	123.6	100.7	<b>83</b>
<b>Growth</b>											
Mean TL at Age-1 (mm)	--	165	143	--	--	184	195	--	--	--	<b>174</b>
Mean TL at Age-3 (mm)	--	339	--	--	--	--	328	--	--	--	<b>334</b>
<b>Relative Weight</b>											
	86	93	95	99	98	95	100	117	97	106	<b>99</b>
<b>Stock</b>											
Quality	85	101	92	92	99	91	95	103	91	94	<b>94</b>
Preferred	85	99	90	102	98	87	93	94	89	81	<b>91</b>
Memorable	--	--	--	--	--	--	97	24	94	94	<b>77</b>
Trophy							--	--	--	--	
<b>Mortality</b>											
Total Mortality	--	55% r2=86	--	--	--	--	43% r2=77	--	--	--	
<b>Fishing Success</b>											
Catch Rate	0.51	0.82	1.08	0.78	0.98	NA	NA	NA	1.71	1.2	<b>0.8</b>
Harvest Rate	0.06	0.16	0.14	0.1	0.08	NA	NA	NA	0.07	0.1	<b>0.11</b>
% Released	89	87	92	92	98	NA	NA	NA	94	89	<b>91.5</b>
Mean Weight	2.49	2.88	2.74	2.92	2.04	NA	NA	NA	2.37	2.48	<b>2.64</b>

## FISHERY FORECAST

The forecast for largemouth bass fishing on Pickwick Reservoir was good with moderate to good year classes produced in sixteen of the last seventeen years. Recruitment to stock sizes has been good in the last seven years and recruitment to larger sizes has improved with RSD15 values improving after declining below acceptable levels in 2005. Recruitment to the fall appeared good and adult size fish recruited well. The CPUE of largemouth bass in the Spring remained high although the catch rate of substock fish declined below the 10 year average for the fourth straight year. The CPUE of age 0 largemouth bass in the fall was good and Wr values were below acceptable levels.

Historical data has shown catch and harvest rates were comparable to other west Tennessee reservoirs. In 2014, largemouth bass comprised 53% of the fish caught by anglers (45% in 2013; 38% in 2009; 37% in 2008; 40% in 2007; 30% in 2006; 63% in 2005; 51% in 2004; 28% in 2003) and fishing pressure was comparable to historic data. Catch rates exceeded historical.

In 2009, Bass tournament information (BITE) revealed Pickwick Reservoir ranked first in the state in the number of tournaments reported (50). However, no tournaments were reported as being held on Pickwick Reservoir (Tennessee) in 2010 - 2014.

Anglers spent \$5.83 per hour fishing for largemouth bass and were willing to expend an additional 65% to participate in largemouth bass fishing at Pickwick Reservoir. The total value of the largemouth bass fishery was \$768,690.

### **MANAGEMENT RECOMMENDATIONS**

Continue with the 15-inch minimum size limit for largemouth bass (implemented in 2004).

## Smallmouth Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Spring Electro Hours</b>	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	<b>1.5</b>
<b>Fall Electro Hours</b>	1.57	1.73	2.88	2.05	1.51	0.73	1.17	0.88	1.69	2.53	<b>1.7</b>
<b>Recruitment</b>											
Age-1 CPUE	--	--	--	--	--	--	--	--	--	--	
Substock CPUE	1.3	4	5.3	2.4	2.7	2.7	6	10	4	8	<b>4.3</b>
<b>Spring Density (n)</b>	23	10	23	24	14	26	44	37	18	57	<b>24</b>
PSD	59	25	33	47	60	86	69	55	67	69	<b>56</b>
RSD Preferred	27	0	13	24	40	64	26	18	42	18	<b>29</b>
CPUE	2.7	6.7	15.3	16	9.3	8.7	29.3	24.7	12	38	<b>15</b>
CPUE ≥ Stock	0.7	2.7	10	12.7	6.7	14.7	23.3	14.7	8	30	<b>10</b>
CPUE ≥ Preferred	0	0	1.3	3.2	2.7	9.3	6	2.7	3.3	5.3	<b>3</b>
CPUE ≥ MSL (15" 2001-2007, 2013; 2008-2012 18";)	0	0	1.3	0.0	1.3	0.7	2	0	3.3	5.3	<b>1.5</b>
<b>Fall Density (n)</b>	17	13	29	20	3	10	13	8	13	16	<b>14</b>
Fall Total CPUE	11.5	8.5	11.3	6	1.9	14.6	10.7	7.9	6.7	6.6	<b>8.8</b>
Fall CPUE Substock	5.6	5.9	1.2	2	1.5	5.8	4.7	4.9	2.4	0.9	<b>3.8</b>
Fall CPUE ≥ Stock	5.9	2.4	10.1	4	0.4	8.8	6	3	4.3	5.7	<b>5</b>
Fall CPUE ≥ Preferred	0	--	--	0.7	0.4	0	0	0	1	2.7	<b>0.3</b>
<b>Growth</b>											
Mean TL at Age-1	--	--	--	--	--	--	--	--	--	--	
Mean TL at Age-3	--	--	--	--	--	--	--	--	--	--	
<b>Mortality</b>											
Total Mortality											
Stock							89	96	95	83	<b>93</b>
Quality	123	91	89	88	--	100	88	--	79	81	<b>94</b>
Preferred	80	72	85	84	--	79	--	--	79	78	<b>79</b>
Memorable	--	--	70	--	--	--	--	--	--	78	<b>74</b>
Trophy	--	--	--	--	--	--	--	--	--	--	
<b>Fishing Success</b>											
Hours/Acre	0.92	0.48	0.1	--	--	NA	NA	NA	NA	0.04	<b>2.7</b>
Catch Rate	0.03	0.14	0.63	--	--	NA	NA	NA	0.21	0.25	<b>0.3</b>
Harvest Rate	0	0	0	--	--	NA	NA	NA	0	0	<b>0.05</b>
% Released	96	93	99	--	--	NA	NA	NA	99	90	<b>90</b>
Mean Weight	2.9	4.63	6.9	--	--	NA	NA	NA	1.03	2.97	<b>4.3</b>

## FISHERY FORECAST

Smallmouth bass have historically produced good year classes. The success of smallmouth bass recruiting to larger sizes was unknown due to the difficulty in obtaining adequate samples. However, anglers reported catches of memorable size fish. In 2007 and 2008, recruitment appeared to decline and was below the 10 year average. Spring catch rates have exceeded historic levels in two of the last three years. Recruitment to the fall appeared satisfactory but Fall night electrofishing was discontinued due to low numbers collected. Length distributions also remained unchanged.

No anglers were interviewed seeking smallmouth bass in 2008, 2009, or 2013. In 2013, relative catch and harvest rates were poor.

**MANAGEMENT RECOMMENDATIONS**

Discussions for similar reciprocal zone management strategies with Mississippi and Alabama have been encouraging. In 2012, Alabama approved a 15-inch minimum size limit for smallmouth bass (implemented in 2013) and will conduct sampling to determine the status of their largemouth bass population in 2013. Mississippi will implement a 15-inch minimum size limit for both largemouth bass and smallmouth bass in 2013. Based on the decisions made by Mississippi and Alabama, I recommended leaving the largemouth bass size limit at 15-inches. The smallmouth bass size limit was lowered from 18-inches to 15-inches in March 2013 to establish similar regulations between the three states.



## Spotted Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Spring electro Hours</b>	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	<b>1.5</b>
<b>Fall Electro Hours</b>	1.57	1.73	2.88	2.05	1.51	0.73	1.17	0.88	1.69	2.53	<b>1.7</b>
<b>Recruitment</b>											
Age-1 CPUE									--		
Substock CPUE	1.3	0.7	0	0	0.7	3.3	0.7	0.7	--	0	<b>1.5</b>
<b>Spring Density (n)</b>	8	13	15	17	12	15	6	9	1	7	<b>13.6</b>
PSD	25	25	93	71	91	67	100	88	--	--	<b>51</b>
RSD Preferred	0	0	13	0	18	13	40	25	--	--	<b>24</b>
CPUE	4	8.7	10	11.3	8	14.5	4	6	--	4.7	<b>8.1</b>
CPUE $\geq$ Stock	2.7	8	10	11.3	7.3	14.5	3.3	5.3	--	4.7	<b>6.5</b>
<b>Fall Density (n)</b>	11	29	2	0	0	4	2	1	--	1	<b>7.3</b>
Fall Total CPUE	7.2	11.3	0.4	1.2	--	5.1	--	--	--	0.3	<b>4.8</b>
Fall CPUE Substock	1.4	7.3	0.2	0	--	3.3	--	--	--	0	<b>1.9</b>
Fall CPUE $\geq$ Stock	5.8	4	0.2	1.2	--	1.8	--	--	--	0.3	<b>3</b>
Fall CPUE $\geq$ Preferred	0	0	0.2	0	--	0	--	--	--	0.3	<b>0.2</b>
Stock	91	95	95	--	--	--	--	--	--	--	<b>96</b>
Quality	76	94	89	--	--	--	--	--	--	--	<b>89</b>
Preferred	--	--	94	--	--	--	--	--	--	--	<b>95</b>
Memorable	--	--	--	--	--	--	--	--	--	--	
Trophy	--	--	--	-	--	--	--	--	--	--	

## White Crappie

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment (Trap Net Survey)</b>											
Age-0 CPUE	--	--	--	--	--	--	--	--	--	--	--
Substock CPUE						No	trap	net	after	2002	
Net nights										--	
Density (n)										--	
<b>Fall Density (Electrofishing Survey)</b>											
PSD	100	--	--	--	--	--	--	--	--	--	100
RSD Preferred	50	--	--	--	--	--	--	--	--	--	50
CPUE	--	--	--	--	--	--	--	--	--	--	
CPUE ≥ Stock	--	--	--	--	--	--	--	--	--	--	
CPUE ≥ MSL (9")	--	--	--	--	--	--	--	--	--	--	
Density (n)	3	2	3		--	--	--	--	--	--	2.8
<b>Relative Weight (Fall)</b>											
Stock	--	--	--	--	--	--	--	--	--	--	
Quality	75	--	--	--	--	--	--	--	--	--	75
Preferred	78	--	--	--	--	--	--	--	--	--	81
Memorable	101	--	--	--	--	--	--	--	--	--	101
Trophy	--	--	--	--	--	--	--	--	--	--	
<b>Angling Pressure (Angler Hours per Acre)</b>											
All Crappie	0.8	1.09	2	0.2	1.3	NA	NA	NA	0.7	1.7	1.2
Fishing Success											
Crappie Catch Rate	0.61	0.44	0.93	1.78	0.88	NA	NA	NA	1.54	0.48	0.7
Crappie Harvest Rate	0.55	0.43	0.8	1.53	0.67	NA	NA	NA	1	0.44	0.6
WC % Released	9	2	8	26	55	NA	NA	NA	52	14	13
WC Mean Weight	0.78	0.78	0.64	0.66	0.64	NA	NA	NA	1.03	1.1	0.79
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
All Crappie	2	4.3	12.5	12.1	1.05	NA	NA	NA	67.4	69.4	9.1

## Black Crappie

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (Trap Net Survey)											
Age-0 CPUE	--	--	--	--	--	--	--	--	--	--	
Substock CPUE					No.	trap	netting	after	2002		
<b>Density</b> (Electrofishing Survey) Inadequate sample size											
PSD											
RSD Preferred											
CPUE											
CPUE ≥ Stock											
CPUE ≥ MSL (9")											
<b>Growth</b> Inadequate sample											
Mean TL at Age-1											
Mean TL at Age-3											
<b>Relative Weight</b> Inadequate sample											
Stock											
Quality											
Preferred											
Memorable											

## FISHERY FORECAST

Crappie were not collected at sufficient densities to evaluate the crappie fishery. Creel survey data collected in 2013 and 2014 showed only 5- and 10%, respectively of the effort was for crappie and only 154 crappie were recorded during the creel survey. Apparently the crappie fishery in Tennessee was limited. Anglers seeking crappie spent \$3.47 per hour seeking crappie and were willing to spend an additional 90% to fish for crappie on Pickwick Reservoir. However, these data represented only 39 interviews.

## MANAGEMENT RECOMMENDATIONS

Continue with the 9-inch minimum size limit and 30 fish creel limit.

## Redear Sunfish

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b>											
Age-1 CPUE	--	--	--	--	--	--	--	--	--	--	--
Substock CPUE	--	--	--	--	--	--	-	--	--	--	--
Total CPUE			No	trap	netting	after	2002	--	--	--	--
Net Nights	--	--	--	--	--	--	--	--	--	--	--
n	--	--	--	--	--	--	--	--	--	--	--
<b>Spring Density (Electro Survey)</b>											
PSD	70	68	78	92	61	69	85	50	100	75	<b>80</b>
RSD Preferred	60	40	39	76	31	35	21	8	88	44	<b>51</b>
CPUE	12.7	16.7	12	30.4	58	17.3	22.7	8	17.3	10.7	<b>20.5</b>
Substock CPUE	6	0	0	0.8	18.7	0	0	0	0	0	<b>2.8</b>
CPUE ≥ Stock	6.7	16.7	12	29.6	39.3	17.3	22.7	8	17.3	10.7	<b>17.4</b>
CPUE ≥ Preferred	4	6.7	4.7	21.3	12	6	4.7	4	15.3	4.7	<b>8.2</b>
n	19	25	18	38	87	26	34	12	26	16	<b>31.2</b>
Spring Hours	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	<b>1.6</b>
<b>Angling Pressure (Angler Hours per Acre)</b>											
Sunfish	--	--	0.15	0.6		NA	-NA	NA	0.7	0.7	<b>0.3</b>
<b>Fishing Success</b>											
Relative Catch Rate	--	--	--	--	--	NA	NA	NA	0.02	0.31	<b>0.07</b>
Relative Harvest	--	--	--	--	--	NA	NA	NA	0.01	0.28	<b>0.06</b>
Redear Mean Weight	--	0.65	0.65	--	--	NA	NA	NA	0.38	0.6	<b>0.66</b>
Redear %Released	--	0	0	--	--	NA	NA	NA	56	6	
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
Sunfish	0	1.8	1.7	2.3	2.6	NA	NA	NA	13.2	27.4	<b>3.8</b>

## FISHERY FORECAST

Although densities were low , the redear sunfish collected were of quality size. However, cooler than normal water temperatures during Spring collections reduced sampling efficiency.

## MANAGEMENT RECOMMENDATIONS

A 20 fish creel limit was implemented for redear sunfish in 2008.

## Bluegill

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b>											
Substock CPUE	--	--	--	--	--	--	--	--	--	--	--
Total CPUE	--		No	trap	netting	after	2002				
Net Nights	--	--	--	--	--	--	--	--	--	--	--
n	--	--	--	--	--	--	--	--	--	--	--
<b>Spring Density (Electrofishing Survey)</b>											
PSD	41	34	51	47	42	20	50	51	58	53	<b>44</b>
RSD Preferred	2	1	1	5	5	1	3	6	1	1	<b>3</b>
CPUE	81.3	76.7	97.3	150.0	157.3	85.3	174.7	168	148.7	58.7	<b>124</b>
Substock CPUE	7.3	3.3	8	33.3	14	28.7	23.3	13.3	2	0.7	<b>15</b>
CPUE ≥ Stock	74	73.4	89.3	116.7	143.3	56.7	151.3	154.7	146.7	58	<b>112</b>
CPUE ≥ Preferred	1.3	0.7	0.7	6	7.3	0.7	4.7	9.3	2	0.7	<b>4</b>
n	122	115	146	161	236	128	262	252	223	88	<b>183</b>
Spring Hours	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	<b>1.5</b>
<b>Angling Pressure (Angler Hours per Acre)</b>											
Sunfish	--	0.43	0.25	0.6	0.8	NA	NA	NA	0.7	0.7	<b>0.5</b>
<b>Fishing Success (Bluegill only)</b>											
Relative Catch Rate	--	2.98	1.81	3.08	6.42	NA	NA	NA	4.75	4.15	<b>3.4</b>
Relative Harvest	--	0	0	0.0	1.02	NA	NA	NA	3.04	1.81	<b>0.77</b>
Bluegill Mean Weight	--	0.26	0.25	--	0.25	NA	NA	NA	0.35	0.33	<b>0.27</b>
Bluegill % Released	--	92	70	84	90	NA	NA	NA	42	51	<b>72</b>
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
Sunfish	0	1.8	1.7	2.3	2.6	NA	NA	NA	13.2	27.4	<b>3.8</b>

## FISHERY FORECAST

The bluegill population was typical of populations seen in other west Tennessee reservoirs. Bluegill were abundant, but few preferred size individuals were collected during sampling. However, cooler than normal water temperatures during Spring collections reduced sampling efficiency.

## MANAGEMENT RECOMMENDATIONS

No recommendations are necessary.

## Gizzard Shad

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b>											
CPUE < 150 mm	0	20.2	4.8	35.2	31.8	21.1	23.9	81.8	21.9	60	<b>27</b>
CPUE ≥ 280 mm	10.2	13.2	52.7	34.3	23.8	25.1	44.4	15.8	26.2	6.3	<b>264</b>
<b>Fall Density</b>											
Fall total CPUE	36.2	101.6	112.9	122.4	110.7	67.2	183.7	192.7	117.8	127	<b>116</b>
Fall CPUE Substock (<180 mm)	0	42.1	4.8	35.2	44.2	21.1	23.5	135.9	20.8	63.8	<b>36</b>
Fall CPUE ≥ Stock (≥181 mm)	36.2	59.4	108.1	87.2	66.5	46.1	160.3	56.8	97	63.2	<b>80</b>
Fall total collected	55	172	291	208	201	60	217	116	212	304	<b>170</b>
Fall Electro Hours	1.57	1.73	2.88	2.05	1.51	0.73	1.17	0.88	1.69	2.53	<b>1.58</b>

## Threadfin Shad

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Fall Density</b>											
Fall percent ≤ 75 mm	16	30	27	100	89	64	98	99	100	100	<b>69</b>
Fall Total CPUE	56.8	208.7	76.6	149.4	145.3	15.5	187.8	502.6	205.3	63.6	<b>172</b>
Fall Total collected	94	361	234	309	250	14	214	439	287	161	<b>245</b>
Fall Electro Hours	1.57	1.73	2.88	2.05	1.51	0.73	1.17	0.88	1.69	2.53	<b>1.58</b>

## FISHERY FORECAST

The majority of the gizzard shad collected were less than 150 mm and CPUE exceeded historic levels. The mean  $W_r$  for gizzard shad larger than stock size was 106. As seen in other reservoirs the threadfin shad recovered over declines in 2010 and CPUE increased over historic levels. Thousands of threadfin shad were seen but not collected. Preferred sizes were abundant for predators.

Since Asian carp have been reported by commercial fishers on Pickwick Reservoir,  $W_r$ 's were calculated for gizzard shad ( $\geq$  stock = 105; Stock-quality=118) and trend data will be monitored.

## MANAGEMENT RECOMMENDATIONS

No recommendations are necessary.

**Other Species Collected**

<u>Species</u>	<u>Gear</u>	<u>Number Collected</u>	<u>Value</u>
Black Crappie	Spring Electro	6	4.0
	Fall Electro	3	1.2
Spotted Bass	Spring electro	7	4.7
	Fall Electro	1	0.4
Skipjack Herring	Fall Electro	1	0.4
White Bass	Fall Electro	1	0.4
Yellow Perch	Spring Electro	1	0.7
	Fall electro	8	3.2

Value:

Electrofishing – number per hour

**2014 Water Quality Monitoring**

Dissolved oxygen levels fluctuated each month but remained above 4.0 ppm at 57' in June (72'depth), 42' in July, and 54' in August. Secchi disc readings averaged 161 cm (range 148 – 175) and conductivity averaged 158 umhos/cm and ranged from 154 (June and July) to 148 (August); pH levels fell within acceptable ranges (8.2-, 7.8-, and 8.0 in June, July, and August, respectively). Alkalinity averaged 39 mg/l during June through August. Measured levels were similar to historic records.

Water levels fluctuated between January and June, with levels exceeding summer pool from mid-April to June and in August. Additional rainfall in December also resulted in higher than normal water levels. Discharge levels exceeded the 100,000 cfs in January, February, May, July, and late December.

**Sampling Station**

TRM 207.8

## Reelfoot Lake - 2014

### Description

**Area (acres):** 10,427      **Mean Depth (feet):** 5.2      **Shoreline (miles):**  
**Counties:** Lake, Obion      **Lake Length:** 12 miles      **Drainage area:** 240 sq. miles  
**Total Fishing Effort (angler hours):** 346,150      **Total Value by Anglers:** \$1,814,160  
**Summer Pool:** 282.2    **Winter Pool:** 283.3    **Formed in 1811-1812 by earthquake**

### Management Strategies:

**LMB:** 15" MLL, 3 fish – 1992

15" MLL, 5 fish – 1996

**Crappie:** 30 fish creel limit – 2002

Commercial Crappie Season Closed - 2001

### Habitat Enhancement and Monitoring - 2014

Deep water fish attractors - 0

Shallow water fish attractors – 0

### Angling Pressure (Angler Hours per Acre)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Total Angler Pressure	55	47	43.7	49.9	41.2	35.2	33.2	32.9	36.8	22.6	
All Black Bass	6.2	5	3.6	4.1	4.2	2.4	3.3	2.9	3.4	2	3.9
Tournaments <sup>BITE</sup>	1	0	0	0	0	0	0	0			1
Lbs/Angler Day <sup>BITE</sup>	4.28	--	--	--	--	--	--	--			5.65
Fish/Angler Day <sup>BITE</sup>	1.67	--	--	--	--	--		--			2.2
Angler Hours <sup>CREEL</sup>								--			
Catch Rate <sup>CREEL</sup>								--			

### Value of Fishery (Trip Expenditures in Thousands)

Black Bass	121	89	71	124	133	56	88.7	87.9	88.4	83.9	80.9
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## Largemouth Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Spring Electro hours</b>	3.5	3.75	3.75	3.5	3.75	3.75	3.75	3.75	3.75	3.75	<b>3.75</b>
<b>Fall Electro hours</b>	2.86	1.5	1.9	NS	2.52	NS	2.86	NS	3.9	4.31	<b>1.91</b>
<b>Recruitment</b>											
Age-1 CPUE	1.1	--	--	6.8	--	14.9		10.7	--	--	<b>6.5</b>
Substock CPUE	2.6	1.9	1.6	4	5.6	15.2	0	9.1	0.8	15.7	<b>5.7</b>
<b>Spring Density (n)</b>	70	76	92	85	61	121	86	131	45	144	<b>101</b>
PSD	72	83	92	77	90	70	79	89	71	79	<b>76</b>
RSD Preferred	28	52	57	54	58	38	42	44	95	51	<b>42</b>
CPUE	20	20.3	24.5	24.3	16.3	32.3	22.9	34.9	12	38.4	<b>27.4</b>
CPUE ≥ Stock	17.4	18.4	22.7	20.3	11.7	17.1	22.9	25.9	11.2	22.7	<b>21.8</b>
CPUE ≥ MSL (15")	5.1	9.1	13.1	10.9	6.2	6.4	8.8	11.5	8	11.4	<b>8.6</b>
CPUE/seine haul	2.7	9.4	2.2	10.6	5.1	3.1	2.9	0.8	5.9	2.9	<b>7</b>
<b>Fall Density (n)</b>	112	98	60	NS	65	NS	77	NS	145	217	<b>89</b>
Fall Total CPUE	39.5	65.3	34.3	NS	29.7	NS	29.3	NS	35.9	47.6	<b>43</b>
Fall CPUE Substock	2.7	4	1.4	NS	4.9	NS	3.7	NS	19.3	5.4	<b>2.5</b>
Fall CPUE>Stock	36.8	61.3	32.9	NS	24.8	NS	25.6	NS	16.6	42.2	<b>41</b>
<b>Growth</b>											
Mean TL at Age-1 (mm)	--	--	213	--	--	148	--	170	--	--	<b>164</b>
Mean TL at Age-3 (mm)	--	--	382		--	--	--	363	--	--	<b>367</b>
<b>Mortality</b>											
Total Mortality	--	--	26% r <sup>2</sup> =88		--	--	--	32% r <sup>2</sup> =0.77	--	--	
<b>Relative Weight (Fall)</b>											
Stock	113	113	111	NS	107	NS	107	NS	114	111	<b>109</b>
Quality	106	108	107	NS	112	NS	100	NS	104	103	<b>106</b>
Preferred	104	103	100	NS	103	NS	102	NS	107	118	<b>103</b>
Memorable	--	121	--	NS	96	NS	--	NS	80	98	<b>101</b>
Trophy			--	NS	--	NS	--	NS	--		
<b>Fishing Success</b>											
Catch Rate	0.89	0.63	0.61	0.73	0.48	0.69	0.58	0.45	0.42	0.53	<b>0.64</b>
Harvest Rate	0.09	0.02	0.03	0.02	0.05	0.01	0	0.01	0.01	0	<b>0.03</b>
% Released	97	96	95	98	92	99	99	97	98	100	<b>97</b>
Mean Weight	2.46	2.35	3.18	3.29	2.89	5.35	2.98	2.53	3.87	--	<b>2.9</b>

**NS – NO SAMPLE**

## FISHERY FORECAST

The largemouth bass fishery remains an under-utilized resource at Reelfoot Lake and may partially explain why this fishery remains of such high quality. CPUE during Spring electrofishing surveys has been < 30 fish/hour in seven of the last twelve years and this is attributed to poor recruitment in six of the last twelve years (good recruitment: ≥ 5.0 YOY LMB/hour). However, sampling conditions in 2008 – 2011 may partially explain reduced catch rates during that period (low water levels associated with drought conditions). In 2013, Spring weather patterns impacted sampling (cooler than normal air temperatures). However, recruitment was excellent in 2014 and electrofishing catch rates exceeded the 10-year average. Although catch rates have generally declined, PSD and RSD15 remained above acceptable levels. As with other reservoirs in west Tennessee, recruitment of largemouth bass fluctuated in the 1990's, although densities of fish ≥15-inches remained comparable to historic levels. However, the low

recruitment of largemouth bass may not be as critical on Reelfoot Lake since fishing pressure was low and over 90% of the fish caught were released.

The length frequency showed good distribution of quality size and larger size classes but few Age 1 fish collected. Relative stock indices continued to exceed the acceptable range which was indicative of a population with a high percentage of preferred and larger size fish. RSD15 has exceeded the acceptable RSD range since 2005 which was indicative of a population with low stock size fish and high numbers of preferred fish. Spring water temperatures (cooler than preferred) contributed to poor samples in 2005, 2006, and 2013), and catch rates were indicative of a population with poor recruitment. Although the Spring CPUE of YOY improved in 2010 (highest since 1997), no substock bass were collected in Spring 2011. One note, 2008, 2010, and 2011 water levels were the lowest seen during the summer and fall due to severe drought conditions. This factor may have negatively impacted YOY survival and recruitment to larger sizes.

Spring CPUE was excellent. Spring CPUE of preferred sizes was comparable to the 10-year average during the last three years, and CPUE of stock size fish improved. Due to the low sample size and unfavorable conditions, a crappie targeting survey was also conducted but largemouth bass were also collected. LMB collected during those samples showed very good recruitment (32.8/hour < 205 mm) and acceptable densities of stock fish. Although Fall catch rates of age 0 and stock size fish declined slightly, those catch rates exceeded the 10-year average.

Electrofishing catch rates were comparable in all four basins (Lower – 23.0; Middle – 52.0; Buck – 49.3; Upper – 32.0/hour). Historically, Buck Basin has appeared to have the highest quality bass population when compared to the three other basins.

Although angler catch rates have declined, angler catch rates have remained acceptable; angler pressure has declined below the ten year average the last eight years. Since 1997, anglers have harvested less than 10% of the fish caught (prior to 1997, anglers harvested more than 20% of the fish caught).

Anglers spent \$2.75 per hour fishing for largemouth bass and were willing to spend an additional 46% seeking largemouth bass on Reelfoot Lake. The estimated total value of the largemouth bass fishery at Reelfoot Lake was \$83,880.

#### **MANAGEMENT RECOMMENDATIONS:**

Continue with the 15-inch minimum size limit with a five fish per day creel limit.

## White Crappie

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment (Trap Net Survey)</b>											
Age-0 CPUE	4.4	--	--	--	3.6		1.9	NS	--	--	<b>3.42</b>
Substock CPUE	4.4	8.1	6.7	NS	3.8	NS	1.5	NS	32.6	21.1	<b>5.2</b>
Total CPUE	9.2	9.2	11	NS	7	NS	3.6	NS	32.7	24	<b>11.4</b>
Net Nights	40	38	39	NS	40	NS	30*	NS	40	40	<b>45.3</b>
n	367	351	427	NS	289	NS	108	NS	1,308	961	<b>587</b>
<b>Spring Density (Electrofishing Survey)</b>											
PSD	66	92	72	95	82	93	95	89	99	100	<b>71</b>
RSD P	35	86	34	75	26	76	54	71	84	98	<b>51</b>
CPUE	17.7	15.7	22.9	23.1	35.5	14.4	33.1	15.2	36.5	28	<b>22.1</b>
CPUE ≥ Stock	17.5	15.7	22.5	17.4	27.5	14.4	33.1	14.9	36.5	26.4	<b>19.6</b>
CPUE ≥ P	3.2	6.7	12.3	17.4	17.7	10.9	17.3	10.7	30.7	25.9	<b>10.7</b>
n	62	62	427	81	61	54	124	57	137	105	<b>135</b>
Spring Hrs	3.5	3.75	--	3.5	2.0(T)	3.75	3.75	3.75	3.75	3.75	<b>3.6</b>
T=Targeted											
<b>Growth</b>											
Mean TL at Age-0 Fall	80	--	--	--	85	--	77	--	--	--	<b>97</b>
Mean TL at Age-2 Fall	263	--	--	--	226	--	236	--	--	--	<b>243</b>
<b>Mortality</b>											
Total Mortality	--	--	--	--	85% r2=69	--	43% r2=72	--	--	--	
<b>Relative Weight (Fall)</b>											
Stock	103	97	101	NS	111	NS	84	NS	--	99	<b>100</b>
Quality	113	101	103	NS	109	NS	91	NS	--	96	<b>109</b>
Preferred	114	116	117	NS	115	NS	111	NS	--	--	<b>115</b>
Memorable	--	113	113	NS	107	NS	101	NS	--	--	<b>107</b>
Trophy	--			NS	--	NS		NS	--	--	
<b>Angling Pressure (Angler Hours per Acre)</b>											
All Crappie	32.3	28.4	26.8	32.6	25.9	20.6	20.5	17.8	23.2	12.8	<b>27.1</b>
<b>Fishing Success</b>											
Crappie Catch Rate	2.43	2.3	2.08	1.91	1.49	1.79	1.63	1.08	1.13	0.57	<b>2</b>
Crappie Harvest	1.33	1.58	1.37	1.36	1.05	1.01	1.15	0.71	0.88	0.52	<b>1.3</b>
WC % Released	47	32	36	30	32	46	33	37	24	11	<b>37</b>
WC Mean Weight	0.63	0.64	0.68	0.68	0.7	0.7	0.68	0.78	0.72	0.94	<b>0.67</b>
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
All Crappie	1,364	1,142	1,118	1,688	1,544	996	1,122.80	983.3	1,375.30	770.2	<b>1,338</b>

**NS – NO SAMPLE**

## Black Crappie

	2005	2006	2007	2008	2009	2010	2011*	2012	2013	2014	Mean
<b>Recruitment (Trap Net Survey - Fall)</b>											
Age-0 CPUE	1	--	--	--	1	NS	3.8	NS	--	--	1.1
Substock CPUE	1.1	2.6	1.2	--	1.5	NS	2.8	NS	6.9	3.2	1.4
Total CPUE	2.8	3.9	5.4	--	2.7	NS	5.2	NS	8.6	5.2	3.5
Net Nights	40	38	39	--	40	NS	30*	NS	40	40	45
n	112	148	213	--	109	NS	157	NS	342	209	165
<b>Density (Spring Electrofishing Survey)</b>											
PSD	83	78	72	94	11	28	70	84	76	100	48
RSD Preferred	43	44	33	61	6	11	21	33	57	80	8
CPUE	20.4	12.9	6.1	5.1	82.2	15.7	9.9	14.9	5.9	2.9	27.3
CPUE ≥ Stock	20.1	12.8	4	5.1	56.7	14.1	9.9	13.6	5.6	2.7	23.1
CPUE Preferred	8.6	4.3	2.2	--	6.2	1.6	2.1	4.5	3.2	2.1	3.7
n	23	19	19	18	92	59	37	56	22	11	87
Spring Hours	3.5	3.75	3.75	3.5	2.0(T)	3.75	3.75	3.75	3.75	3.75	3.65
% Black crappie	27	23	4	18	60	52	23	50	14	9	37
T=Targeted											
<b>Growth (Fall)</b>											
Mean TL at Age-0 Fall	89	--	--	--	--	91	--	82	--	--	100
Mean TL at Age-2 Fall	217	--	--	--	--	167	--	218	--	--	199
<b>Mortality</b>											
Total Mortality	--	--	--	--	--	85% r <sup>2</sup> =87	--	42% r <sup>2</sup> =65	--	--	--
<b>Relative Weight (Fall)</b>											
Stock	108	96	97	NS	96	NS	123	NS	106	110	104
Quality	111	106	107	NS	113	NS	104	NS	118	112	104
Preferred	105	101	107	NS	114	NS	106	NS	100	101	103
Memorable	99	98	105	NS	99	NS	97	NS	100	98	99

**NOTE:** In 2009, mean total length at age 2 estimated from early Spring electrofishing. **NS – NO SAMPLE**

\* 2011 - Only Lower Blue Basin and Upper Blue Basin were sampled with trap nets due to very low water levels in the Fall.

## FISHERY FORECAST

Spring electrofishing catch rates were below the 10-year average and targeted sampling showed no better results. However, spring electrofishing relative stock indices depict a population of quality individuals (84% ≥ 250 mm) and Wr's were within or exceeded the acceptable range. Black crappie CPUE were also low in Spring electrofishing (n=11) and fall electrofishing collected 12.5 fish/hour. Nearly 50% of the black crappie collected in the fall were ≥ 250 mm.

The CPUE during trap net showed YOY catch rates were similar between Middle and Upper Blue (mean = 32.9/NN) and Lower Blue and Buck Basin (mean=9.4/NN). Although the majority of crappie fishing is in the Lower Basin, Lower Blue Basin has historically had the lowest trap net catch rates. Although black crappie abundance declined in 2013 and 2014, percent abundance of black crappie during electrofishing surveys has remained around 50% during the three of the last six years. The density of black crappie will continue to be monitored. The crappie fishery appears to be on the decline. Although trap netting surveys were not conducted during 2010-2012 (very low water levels), the crappie fishery probably

experienced very low recruitment of crappie during those years since crappie do not respond well to drought conditions (drought periods in 2010, 2011).

Fishing pressure for crappie has decreased below the 10 year average the last five years although crappie have remained the most sought species. The catch rate for crappie declined from 1979 to 2001, when fishing pressure increased. Although anglers harvest nearly one crappie per hour, harvest rates have generally declined since 2006. The total number of fish harvested per acre (25.3/acre in 2001; 46/acre in 2002; 72.7/acre in 2003; 102/acre in 2004; 87/acre in 2005; 68/acre in 2006; 55.9/acre in 2007; 50.4/acre in 2008; 42.5/acre in 2009; 22.3/acre in 2010; 22.2/acre in 2011; 12.6/acre in 2012; 20.4 in 2013; 7.1 in 2014) has decreased since 2005 and may be attributed to fishing conditions during March and April (fluctuating water levels and unstable weather patterns), gasoline prices, low recruitment levels, and the decline in fishing pressure. During 2013, water temperatures did not warm to normal Spring water temps until early May and this late warm-up negatively impacted crappie harvest; in 2014, similar Spring conditions existed and the lake froze for 3-4 weeks in March. As previously mentioned, low recruitment levels are suspected for 2010-2012 since very low water levels and drought periods existed during those years.

The average weight of the crappie harvested at Reelfoot Lake has increased since 1985 and remained high quality; the increased weight of crappie was attributed to the increased density of the silverside population. The CPUE of silverside collected in seine hauls increased but remained below the 10-year average. This decline is a concern since silverside is important forage for crappie. The forecast for the fishery will depend on abundance of silverside, fishing pressure, and the effects of eliminating the commercial crappie fishery (after the 2000 - 2001 season). The TWRA will closely monitor the population.

Anglers spent \$4.31/hour seeking crappie and were willing to spend an additional 34% to fish for crappie at Reelfoot Lake. The total value of the fishery by anglers was \$770,240, the lowest value recorded since economic information has been collected. The high estimate for anglers seeking crappie was attributed to the fact that 30% of the anglers interviewed traveled over 250 miles to fish at Reelfoot Lake. Although the crappie fishery has declined, anglers still travel long distances.

## **MANAGEMENT RECOMMENDATIONS**

Continue with the 30 fish creel limit for crappie (implemented in 2002).

## Bluegill

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment (Trap Net Survey - Fall)</b>											
Age-1 CPUE	--	--	2.4	NS	--	NS	--	7.2 (EL)	--	--	4
Substock CPUE	2	3.3	1.2	NS	0.2	NS	0.1	NS	1	2.1	1.4
Total CPUE	3	5.6	3.7	NS	1.5	NS	0.9	NS	1.2	3.7	3.1
Net Nights	40	38	39	NS	40	NS	30*	NS	40	40	45
n	118	211	145	NS	60	NS	28	NS	47	149	136
<b>Density (Spring Electrofishing Survey)</b>											
PSD	72	82	82	59	57	57	68	67	58	38	68
RSD Preferred	7	23	36	34	12	16	15	21	17	7	19
CPUE	123.4	73.1	72	38.9	80.8	119.2	48.8	73.3	50.4	115.5	86.2
Substock CPUE	46.9	6.9	2.4	4	5.9	43.7	5.6	8.8	13.3	10.1	16.4
CPUE ≥ Stock	76.5	67.2	69.6	35	74.9	75.5	43.2	64.5	37.1	105.3	69.9
CPUE ≥ Preferred	5.4	14.7	25.1	12	9.3	11.7	6.9	13.3	6.4	6.9	12.3
n	432	274	270	136	303	447	183	275	189	433	318.7
Spring Hours	3.5	3.75	3.75	3.5	3.75	3.75	3.75	3.75	3.75	3.75	3.75
<b>Growth</b>											
Mean TL at Age-1	--	--	69	--	--	--	--	75	--	--	69
Mean TL at Age-3	--	--	175	--	--	--	--	188	--	--	175
<b>Mortality</b>											
Total Mortality	--	--	--	--	--	--	--	69% r <sup>2</sup> =0.95	--	--	--
<b>Angling Pressure (Angler Hours per Acre)</b>											
Sunfish	14.3	13	12	11.7	9.2	9.2	6.9	8.6	8.2	5.8	9.2
<b>Fishing Success</b>											
Sunfish Catch Rate	3.04	2.52	2.33	2.5	2.21	2.33	1.79	1.01	2.22	2.53	2.3
Sunfish Harvest Rate	2.17	2.9	1.82	2.05	1.79	1.71	1.44	0.81	1.83	1.88	1.8
Bgill Mean Weight	0.35	0.39	0.43	0.45	0.42	0.43	0.44	0.51	0.51	0.5	0.4
Bgill % Released	31	26	26	21	22	31	24	23	17	29	27
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
Sunfish	763	682	648	731	570	500	466.9	552.9	520.5	363.4	546

### NS – NO SAMPLE

\* Only Lower Blue Basin and Upper Blue Basin were sampled with trap nets due to very low water levels in the Fall.

## FISHERY FORECAST

The bluegill fishery remains one of the best in the state. However, the CPUE of RSDP fish has been below the 10-year average in six of the last seven years. The apparent declines in density and quality may be attributed to sampling conditions (cooler water temps, drought conditions, and unusually warm water temps). Total CPUE has fluctuated since 2002. Estimated total mortality appeared high (69%) in 2012. However the CPUE of stock size fish increased significantly in 2014 and the majority were collected in the stock-quality range – 2015 data will determine if these fish recruited well to quality sizes.

Fishing pressure has declined 182% since 2004, but catch and harvest rates increased and were comparable to the ten year average. Since historic data has shown that over 49% of the anglers travel more than 100 miles, gasoline prices may contribute to the decline in fishing pressure. Mean weight and RSD8 remained above the 10 year average.

Anglers spent \$4.49/hour seeking bluegill and were willing to spend an additional 33% to fish for bluegill

at Reelfoot Lake. The total value of the fishery by anglers was \$363,440. The high value estimate for anglers seeking bluegill was attributed to the fact that 30% of the anglers interviewed traveled over 250 miles to fish.

#### MANAGEMENT RECOMMENDATIONS:

No recommendations are necessary.

**NOTE:** As requested by Mike Hayes, TWRC Commissioner, 115,130 redear sunfish were stocked into Reelfoot Lake in November, 2010 (1,588/pound). These fish were stocked in Lower Blue Basin.

### Channel Catfish

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Angling Pressure (Angler Hours per Acre)</b>											
Catfish	0.42	0.22	<0.1	0.65	0.4	0.6	0.6	1.1	0.14	0.05	<b>0.5</b>
<b>Fishing Success</b>											
Catch Rate	0.42	0.22	<0.1	0.65	0.4	0.6	0.6	1.1	0.14	0.7	<b>0.8</b>
Harvest Rate	0.52	0.62	0.83	0.49	1.03	0.24	0.34	0.62	0.55	0.19	<b>0.6</b>
% Released	0.58	0.82	0.98	0.55	1.22	0.4	0.43	1.11	0.79	20	<b>25</b>
Mean Weight	0.52	0.62	0.83	0.49	1.03	0.24	0.34	0.62	0.55	2.52	<b>2.6</b>
<b>Value of Fishery (Trip Expenditures in Thousands)</b>											
Catfish	2.25	3	2.43	2.69	2.5	2.48	35	2.09	NA	--	<b>17.5</b>

## Gizzard Shad

<b>Recruitment</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Mean</b>
CPUE < 150 mm	17.9	22	253.2	NS	55.6	NS	61.5	NS	43.3	21.1	<b>61.7</b>
CPUE ≥ 280 mm	1	0	4.2	NS	1.9	NS	42	NS	0.5	0	<b>1.8</b>
<b>Density</b>											
Fall total CPUE	77.2	110	350.2	NS	165	NS	114	NS	106.6	70	<b>153.7</b>
Fall CPUE Substock	34	56	314.2	NS	77.3	NS	81.2	NS	71	31.7	<b>97.6</b>
Fall CPUE ≥ Stock	43.2	54	36	NS	87.7	NS	33.8	NS	35.5	38.2	<b>56.3</b>
Fall total collected (n)	216	165	571	NS	356	NS	285	NS	317	310	<b>301</b>
Fall Electro Hours	2.9	1.9	1.9	NS	2.52	NS	2.5	NS	3.9	4.31	<b>2.23</b>

## Threadfin Shad

<b>Density</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Mean</b>
Fall CPUE < 75 mm	23.1	0	33.2	NS	0	NS	35.7	NS	1	0	<b>12.5</b>
Fall Total CPUE	23.1	0	40	NS	0	NS	52.2	NS	1	0	<b>15</b>
Fall Total collected (n)	6-	0	571	NS	0	NS	145	NS	4	0	<b>130</b>

**NS – NO SAMPLE**

## Other Prey

Silverside no/seine haul	385	979	115	158	272.4	37.8	60.7	67.7	176.3	129.8	<b>250</b>
Bluegill no/seine haul	176	215	184.9	194.7	1,055	239.9	68.1	206.4	48.2	56.4	<b>265</b>

## MANAGEMENT RECOMMENDATIONS:

Extremely low water levels have compromised fall survey data in the past. Historically gizzard shad and bluegill have provided preferred size prey for predators, with threadfin shad providing good prey densities occasionally. In general, gizzard shad recruitment appeared to decline and recruitment declined below historical levels. Bluegill densities declined in seine surveys and were lower than the historic average. Since Asian carp have been collected during surveys, Wr's were calculated for gizzard shad (2013:  $\geq$  stock = 85; Stock-quality=85; 2014:  $\geq$  stock = 95; Stock-quality=95 ) and trend data will be monitored.

The average weight of the fish harvested at Reelfoot Lake has increased since 1985 and remained high quality; The increased weight of crappie was attributed to the increased density of the silverside population. Although catch rates increased in 2013 seine hauls, the CPUE of silverside collected in seine hauls has decreased dramatically and is a concern since silverside is important forage for crappie. However, water levels were very low and may have impacted capture of this species during sampling. The forecast for the white crappie fishery will depend on abundance of silverside, fishing pressure, and the effects of eliminating the commercial crappie fishery (after the 2000 - 2001 season). The TWRA will closely monitor the population.



**Other Species Collected - 2014**

<b>Species</b>	<b>Number Collected</b>	<b>Gear</b>	<b>Value</b>
Black Crappie	58	Targeted Electro	11.2
Bluegill	149	Trapnetting	3.7
Bowfin	22	Trapnetting	0.6
Channel Catfish	6	Trapnetting	0.2
Common Carp	4	Trapnetting	0.1
Freshwater Drum	8	Trapnetting	0.2
Gizzard Shad	212	Trapnetting	5.3
Golden Shiner	20	Trapnetting	0.5
Largemouth Bass	290	Targeted Electro	55.8
	1	Trapnetting	<0.1
Longear Sunfish	18	Trapnetting	0.5
Longnose Gar	1	Trapnetting	<0.1
Orangespotted Sunfish	142	Trapnetting	3.6
Spotted Gar	15	Trapnetting	0.4
Spotted Sunfish	2	Trapnetting	0.1
Warmouth	42	Trapnetting	1.0
White Crappie	86	Targeted Electro	16.5
Yellow Bass	200	Trapnetting	50.0

**2014 Seine Data**

<b>Species</b>	<b>&lt;1.0</b>	<b>1.0 - 1.9</b>	<b>2.0 - 2.9</b>	<b>3.0 - 3.9</b>	<b>4.0 - 4.9</b>	<b>&gt;5.0</b>	<b>total #</b>	<b>%of total</b>	<b>%of sample</b>	<b>CPUE</b>
Inland Silversides	0	635	528	5	0	0	1168	52.68%	77	129.78
Gambusia	10	69	0	0	0	0	79	3.56%	77	8.78
Warmouth Sunfish	0	0	0	0	0	0	0	0.00%	0	0
Bluegill Sunfish	43	394	53	14	4	0	508	22.91%	100	56.44
Blk. Spt. Topminnow	0	0	0	0	0	0	0	0.00%	0	0
White Crappie	0	0	0	0	0	0	0	1.71%	0	0
Spotted Sunfish	0	3	29	6	0	0	38	1.71%	33	4.22
Pugnose Minnow	0	1	2	0	0	0	3	0.14%	22	0.33
Largemouth Bass	0	0	14	8	4	0	26	1.17%	44	2.89
Black Crappie	0	0	0	0	0	1	1	0.05%	11	0.11
Yellow Bass	0	90	201	14	0	15	320	14.43%	77	35.56
Golden Shiner	0	0	8	0	0	0	8	0.36%	11	0.89
Channel Catfish	0	0	8	0	0	1	9	0.41%	11	1
Org. Spt Sunfish	0	0	0	0	0	0	0	0.00%	33	0
Bigmouth Buffalo	0	0	0	0	0	0	0	0.00%	0	0
Smallmouth Buffalo	0	0	0	0	0	0	0	0.00%	0	0
Gizzard Shad	0	0	0	0	0	0	0	0.00%	0	0
Bullhead Minnow	0	53	4	0	0	0	57	2.57%	11	6.33
Common Carp	0	0	0	0	0	0	0	0.00%	0	0
<b>Totals</b>	<b>53</b>	<b>1245</b>	<b>847</b>	<b>47</b>	<b>8</b>	<b>17</b>	<b>2217</b>			

9 sites sampled, starting at 9 PM until 11 PM

Water temperature 26 to 29 degrees (C)

Water levels summer pool, no rain for past 30 days

Collectors were: 1340, 1343, 1344, 1208

Water with good bloom, many rocks on sites, causing hangups pulling seines.

**2014 Water Quality Monitoring (Six sampling stations)****JUNE**

Dissolved oxygen levels were above 4.0 ppm until the bottom (fell below 4.0 ppm a bottom) and secchi disc readings continued to increase and averaged 48.8 cm (48.6 cm in 2013) at the six sites which was a dramatic increase over 2009-2012 levels (14 cm; 2011 34.7 cm; 2012 – 38 cm) In general secchi disc readings were similar in all basins. Water temperatures averaged 28.1°C at 2 feet and water temperatures increased as sampling progressed upstream, as did pH.

**JULY**

Dissolved oxygen levels were good at all depths at all stations and as in June, D.O. levels fell below 4.0 ppm at the bottom at all sites. Water temperatures were similar to June temperatures (28.0°C at 2'). Secchi disc average 40 cm (42.3 cm in 2013; 37 cm in 2012) and surface pH readings averaged 10 (8.4-2013; 9.2 in 2012) at the six sites. In general pH readings were similar in all basins.

**AUGUST**

Surface dissolved oxygen levels were less than 5.0 ppm at all sites and fell 4.0 ppm below 5' at Office station, 5' at Catfish Channel, 2' in Joe basin, 2' in Palestine, 2' in Brewer's Bar, and 3' in Upper Blue Basin (see depth chart for each site below). Water temperatures averaged 30.1°C (28.1 C in 2013) at 2' at the six stations. Secchi disc readings average 40 cm (44.7 cm in 2013; 29 cm in 2012) and were similar between stations. The surface pH readings averaged 10.4 (8.6 in 2013; 9.8 in 2012) at the six sites.

**Sampling Stations**

Office Station – bottom depth – 10'

Catfish Channel – bottom depth – 14'

Joe Basin - bottom depth – 5'

Palestine - bottom depth – 4'

Brewer's Bar - bottom depth – 3'

Upper Blue Basin- bottom depth – 6'

## REGION 2

## Cheatham Reservoir

### Description

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**Area (acres):** 7,450      **Mean Depth (feet):** 18      **Shoreline (miles):** 320

**Counties:** Davidson, Cheatham and Sumner

**Full Pool Elevation (feet-msl):** 385      **Winter Pool Elevation (feet-msl):** 384

**Dam Completion:** 1952

### Summary:

Annual fish population surveys are used to evaluate and manage Cheatham Reservoir fisheries. Largemouth bass, crappie and catfish are important fisheries. Walleye, sauger and striped bass are stocked annually to enhance and develop the riverine fishery.

Total largemouth bass catch-per-unit effort (CPUE) from electrofishing in 2014 was 91 fish/hour, with 26/hour over 15 inches. CPUE of sub-stock largemouth bass was low (4.7/hour) indicating a weak year-class. Abundance of fish over 15 inches was high (26/hour). Proportional stock density was in the acceptable range (62 %) and relative stock density (preferred) was 31 % indicating a slightly higher proportion of fish over 15 inches. Electrofishing CPUE was 86/hour of stock size and greater largemouth bass. This indicates sufficient numbers of largemouth bass to maintain quality fishing through 2016.

White crappie are the predominate crappie species in Cheatham Reservoir. Fall trap netting revealed a stronger year-class (2.2 age-0/net night) in 2014 following two weak year classes in 2012 and 2013. Overall abundance was good with 3.5 fish caught net/night. Recent (2013) age and growth data shows that these fish should reach the minimum length limit by age 3. Abundance of sub-legal crappie was also good (1.0/net night). Crappie fishing should continue to be good as the strong 2010 and 2011 year classes move through. The strong 2014 year class should recruit into the fishery in 2016-2017.

Sauger (51,423) were stocked in Cheatham reservoir at a rate of 6.9/acre in 2014. Evaluating these stockings is necessary to determine success. Unfortunately, high spring flows have prevented sampling. Walleye (91,063) were also stocked in 2014. This stocking is significant (13.2/acre) and should contribute to the fishery. We intend to evaluate the fishery in 2016 to determine if the annual stocking of sauger and walleye are making a contribution.

Striped bass stockings have been variable over the past ten years, ranging from 2 to 20 per acre. In 2014, 15,908 (2.1/acre) striped bass were stocked into Cheatham Reservoir. Evaluation of the striped bass fishery is difficult because creel surveys are not conducted on Cheatham Reservoir. Quantitative sampling is also difficult because of the riverine habitat, high flows and the unpredictable movement patterns of striped bass. Regular catches of striped bass are observed below Old Hickory Dam in the spring and are a very important component of this fishery.

**Largemouth Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	8	8	10	12	12	4	18	6	12	5
<b>Density</b> (electrofishing)										
PSD	70	73	71	68	60	60	65	59	75	62
RSD (preferred)	28	24	25	23	20	27	19	23	28	31
CPUE (total)	123	75	100	132	133	116	145	96	106	91
CPUE $\geq$ Stock	115	67	91	120	121	111	127	90	94	86
CPUE $\geq$ 15"	33	16	23	28	24	30	24	21	26	26
CPUE $\geq$ 20"	4	1	2	4	4	2	2	2	1	3
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	200	-
Length Age-3	-	-	-	-	-	-	-	-	336	-
<b>Condition</b> (spring electrofishing)										
Stock	86	93	91	99	93	90	94	88	92	91
Quality	89	93	92	100	98	92	99	94	99	86
Preferred	97	93	94	98	99	97	98	97	103	92
Memorable	97	85	105	102	103	102	103	93	97	97
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	0.34	-

**Spotted Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	1	0	1	1	1	1	2	1	4	2
<b>Density</b> (electrofishing)										
PSD	36	56	63	76	51	31	58	86	42	43
RSD (preferred)	0	0	8	6	18	8	0	0	4	43
CPUE (total)	16	3	22	17	15	5	10	3	12	10
CPUE $\geq$ Stock	15	3	21	16	14	4	8	2	9	9
<b>Condition</b> (spring electrofishing)										
Stock	95	111	97	127	109	96	103	100	114	91
Quality	90	93	97	115	103	93	107	100	103	92
Preferred	-	-	104	110	105	98	-	-	116	91
Memorable	-	-	111	-	-	-	-	-	-	-

**White Crappie**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	2.7	0.6	1.5	0.6	0.6	6.0	3.2	0.2	0.8	2.2
<b>Density</b> (trap netting)										
PSD <sup>a</sup>	79	91	97	98	95	100	83	76	77	25
RSD (preferred) <sup>a</sup>	50	74	64	92	68	79	70	48	55	23
CPUE (total)	3.7	1.2	2.7	1.5	1.5	9	6.5	2.9	2.5	3.5
CPUE $\geq$ Stock	1	0.6	1.2	0.9	0.9	2.7	3.3	2.7	1.7	1.3
CPUE $\geq$ MLL (10-inches)	0.6	0.3	0.7	0.5	0.6	1	0.7	1.5	1	0.3
<b>Growth</b> (electrofishing) (white crappie)										
Length Age-1	-	-	-	-	-	-	-	-	169	-
Length Age-3	-	-	-	-	-	-	-	-	283	-
<b>Condition</b> (trap netting)										
Stock	78	97	91	87	95	89	87	98	86	91
Quality	84	94	95	98	100	87	88	97	88	93
Preferred	87	93	87	102	99	91	88	99	88	79
Memorable	87	93	-	99	95	89	87	90	78	85
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	0.65	-

<sup>a</sup> Targetted Electrofishing

**Sauger**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (gill netting)										
CPUE (total)	-	2.6	-	-	-	-	-	-	-	-
<b>Growth</b> (gill netting)										
Length Age-1	-	10.9	-	-	-	-	-	-	-	-
Length Age-3	-	15.1	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	35,937	46,316	59,654	37,676	39,382	0	45,872	0	57,141	51,429
#/Acre	4.8	6.2	8.0	5.1	5.3	0.0	6.2	0.0	7.7	6.9



**Walleye**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Stocking</b>										
#	135,235	0	28,403	33,984	37,215	0	54,908	15,889	14,807	98,063
#/Acre	18.2	0.0	3.8	4.6	5.0	0.0	7.4	2.1	2.0	13.2

**Striped Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Stocking</b>										
#	61,872	81,831	125,387	78,736	154,914	82,534	75,134	59,376	46,116	15,908
#/Acre	8.3	11.0	16.8	10.6	20.8	11.1	10.1	8.0	6.2	2.1

**Habitat Enhancement 2014**

Type of Work	Details	Quantity	
		New	Renovated
None			

**Water Quality Monitoring 2014**

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Parameter	Sampling Period	Water Quality
Temperature	July/August	Normal
Dissolved Oxygen	July/August	Normal

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## Old Hickory Reservoir

### Description

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**Area (acres):** 22,500      **Mean Depth (feet):** 32      **Shoreline (miles):** 440

**Counties:** Davidson, Sumner, Wilson, Trousdale and Smith

**Full Pool Elevation (feet-msl):** 445      **Winter Pool Elevation (feet-msl):** 444

**Dam Completion:** 1954

### Summary:

Anglers spent a total of 627,743 hours fishing Old Hickory Reservoir in 2014. This is a substantial increase over 2013 (523,113 hours). Bass fishing remains the most popular and accounts for 35 % of the total effort. Anglers spent 219,417 hours fishing for bass on Old Hickory in 2014. Of that, 214,712 hours was spent targeting largemouth bass. Creel surveys revealed a targeted catch/rate of 0.71 largemouth bass per hour.

Annual electrofishing surveys indicated a high abundance of largemouth bass (124/hour) Abundance of largemouth bass over 15 inches was also high (23.5/hour). Spring electrofishing indicated a weak age-0 year class in 2014 (5.6 sub-stock bass/hour). This follows a strong year class in 2013 (23 sub-stock bass/hour). Proportional stock density (PSD) and catch per unit effort (CPUE) of stock size bass indicates sufficient and consistent recruitment, for the past several years.

Crappie fishing was the second most popular fishery in 2014. White crappie are the predominate species of crappie caught in Old Hickory making up 75% of the total catch. Trap net catch was similar (85% white crappie). Angler catch rate was high (1.2 crappie/hour) with a mean weight of 0.8 pounds. Trap net results indicate a moderate 2014 year class. Black crappie made-up for 25% of the total crappie catch in 2014, and blacknose black crappie accounted for less than ½%.

Blacknose black crappie have been stocked for seven of the last ten years and have not contributed to the fishery (less than 1% of trap net catch in 2014). Although it is unclear why stockings were so unsuccessful, it was decided to discontinue stocking at this time in order to shift stockings to a reservoir where a greater impact was realized.

Old Hickory Reservoir supports a world class striped bass fishery with regular catches of 50 to 60 pound fish. The fishery is difficult to evaluate using standard sampling techniques. However, creel data shows anglers spent 29,634 hours fishing for striped bass in 2014 with a catch rate of 0.23fish/hour. Fishermen were satisfied with both quality and quantity of the fishery. Good water quality, forage and riverine habitat make Old Hickory Reservoir ideal for striped bass introductions.

Sauger fishing on Old Hickory ranked second in the statewide creel report (Black 2014) when targeted angler hours were compared (16,945). This was the lowest angler effort in the past ten years. Angler catch rate was 0.72 sauger/hour. Thirty sauger were collected during spring 2014 gill netting, the overall catch rate was 2.56 sauger/hour. This was the lowest catch rate from the past ten years. Fish were ten inches and greater with the majority being 14 inches. Gill netting for sauger is difficult because of unpredictable water conditions. High spring flows prevent personnel from effectively collecting fish below Cordell Hull Dam, where sauger concentrate prior to spawning.

Stocking rates for 2013 and 2014 were 11.3 sauger/acre; this is the highest rates for at least ten years. These rates should help determine if stocking greater numbers can make a substantial impact to the fishery.

Walleye stocking in Old Hickory began in 2004 to enhance this fishery. Stocking rates have varied greatly from 11/acre down to 3, with a mean of 6.3/acre. Evaluating the success has been difficult. Annual gill netting has yielded poor catches with the highest catch rate in 2005 with 4.9 fish/hour, this followed a stocking rate over 10/acre in 2004.

Intended angler catch rate has averaged 0.2 walleye/hour. Angler attitude has been positive with reports of walleye limits and fish caught exceeding ten pounds. However, quantitative data has not reflected fisherman reports. For stockings to be successful adequate numbers and sizes of fingerlings are most important. Stocking adequate numbers are essential in order to evaluate whether a stocking is successful. Old Hickory should be stocked with a minimum of 10/acre for 3-5 years in order to determine if the re-establishment of walleye is possible.

**Black Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
All Black Bass (hrs)	239,781	357,908	424,425	434,275	358,995	250,259	197,134	261,258	209,533	219,417
(hrs/acre)	10.7	15.9	18.9	19.3	16.0	11.1	8.8	11.6	9.3	9.8
Any Black Bass (hrs)	0	0	0		0	0	0	0	362	1,673
(hrs/acre)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0
Largemouth Bass (hrs)	238,499	354,360	422,354	431,904	352,613	249,440	194,093	258,725	208,213	214,712
(hrs/acre)	10.6	15.7	18.8	19.2	15.7	11.1	8.6	11.5	9	15
Smallmouth Bass (hrs)	1,093	3,548	2,071	2,371	5,708	819	3,041	2,533	958	2,741
(hrs/acre)	0.0	0.2	0.1	0.1	0.3	0.0	0.1	0.1	0	0
Spotted Bass (hrs)	189	0	0	0	674	0	0	0	0	291
(hrs/acre)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0
<b>Tournaments (all black bass)</b>										
# Tournaments (BITE)	13	4	4	3	0					
Pounds/Angler Day (BITE)	3.38	3.6	4.38	4.48	0					
Bass/Angler Day (BITE)	1.35	1.96	2.24	1.98	0					
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	1,070,970	2,050,150	2,110,460	1,946,230	1,498,460	814,400	677,200	1,782,490	451,170	606,450
Any Black Bass	0	0	0	0	0	0	0	0	0	0
Largemouth Bass	1,068,760	2,048,480	2,107,680	1,945,350	1,485,560	812,970	676,910	1,771,520	451,170	592,880
Smallmouth Bass	2,210	1,670	2,780	880	12,900	1,430	290	10,970	0	13,570
Spotted Bass	0	0	0	0	0	0	0	0	0	0

**Largemouth Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	6	25	10	20	21	8	12	9	20	6
<b>Density</b> (electrofishing)										
PSD	63	64	27	73	58	62	78	67	70	65
RSD (preferred)	21	21	24	15	16	23	24	25	22	20
CPUE (total)	140	140	157	196	181	127	136	105	145	124
CPUE $\geq$ Stock	114	114	147	177	160	119	124	96	125	118
CPUE $\geq$ 15	24	24	36	27	27	27	29	24	27	24
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	5.4	-	-
Length Age-3	-	-	-	-	-	-	-	12.9	-	-
<b>Condition</b> (spring electrofishing)										
Stock	84	101	94	97	94	87	97	88	95	95
Quality	86	100	94	101	100	92	102	90	98	90
Preferred	94	100	94	99	103	95	106	97	100	95
Memorable	108	107	95	100	108	99	101	100	103	100
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.5	0.8	0.9	1.2	1	0.8	0.9	0.72	0.78	0.71
Harvest Rate (intended)	0.04	0.1	0.1	0.1	0.1	0.07	0.07	0.08	0.08	0.07
% Released	91.4	90.8	91.5	95.3	92.3	87.4	90.2	85.9	90.1	89.3
Mean Weight	2.3	2.1	1.9	2	1.8	2	1.91	1.91	2.35	2.25

**White Crappie**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	0.7	0.5	2.6	0.9	2.6	3.3	1.4	0.8	1.8	1.3
<b>Density</b> (trap netting (t) /electrofishing (e))										
PSD (e)	93	97	100	94	99	98	97	98	97	99
RSD (preferred) (e)	50	77	65	82	68	60	54	85	77	78
CPUE (total) (t)	1.3	1.3	3.5	2.5	3.6	5.1	3.3	2.7	2.7	1.8
CPUE $\geq$ Stock (t)	0.6	0.8	0.8	1.6	1	1.9	1.9	1.9	1	0.6
CPUE $\geq$ MLL (10-inches) (t)	0.2	5	0.2	0.8	0.4	0.6	0.5	1	0.7	0.4
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	166	-	-	
Length Age-3	-	-	-	-	-	-	283	-	-	289
<b>Condition</b> (trap netting)										
Stock	79	96	90	94	81	80	85	89	94	99
Quality	80	106	92	102	97	88	86	94	97	90
Preferred	85	99	89	98	99	93	81	94	89	129
Memorable	88	97	88	97	95	86	76	88	81	100
<b>Blacknose Black Crappie Stocking</b>										
#	36,058	102,472	0	29,552	0	0	61,048	68,708	70,036	192,578
#/Acre	1.6	4.6	0.0	1.3	0.0	0.0	2.7	3.1	3.1	8.6
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	55,769	48,607	134,570	105,202	168,874	104,013	77,696	149,715	80,894	91,269
Angler Hours/Acre	2.5	2.2	6.0	4.7	7.5	4.6	3.5	6.7	3.6	6.4
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	0.8	1.3	1.5	1.3	1.6	1.2	1.6	1.2	1.64	1.2
Harvest Rate (any crappie)	0.2	0.6	0.6	0.6	0.63	0.39	0.52	0.45	0.82	0.75
% Released (white crappie)	69	63.2	59.3	61.8	58.4	55.6	64.8	60.8	49.7	35.2
Mean Weight (white crappie)	0.7	0.8	0.7	0.9	0.76	0.89	0.89	0.71	0.8	0.8
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	281,200	53,280	368,970	367,510	315,720	221,950	156,100	204,310	66,780	275,700



**Bluegill**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all sunfish)	57,569	63,103	70,707	40,453	32,055	27,927	16,060	20,524	13,196	18,180
Angler Hours/Acre	2.6	2.8	3.1	1.8	1.4	1.2	0.7	0.9	0.6	0.8
<b>Fishing Success</b> (creel)										
Catch Rate (any sunfish)	2.9	2.6	3.0	3.9	3.4	2.2	3.6	3.1	2.9	2.7
Harvest Rate (any sunfish)	1.0	1.1	1.2	3.5	1.1	0.3	0.8	1.1	1.0	1.6
% Released (bluegill)	64.8	71.7	75.2	85.0	79.7	81.1	84.9	81.4	81.2	53.4
Mean Weight (bluegill)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Sunfish	104,600	98,530	119,920	115,900	59,180	68,810	18,910	57,100	15,170	

**Sauger**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (gill netting)										
PSD	50	74	91	40	84	91	26	50	49	77
RSD (preferred)	9	16	21	10	13	38	4	3	5	7
CPUE (total)	26	28	13	11	14	2.8	21	10	4.4	2.56
CPUE ≥ Stock	26	28	13	11	14	2.8	21	9.9	4.4	2.56
CPUE ≥ MLL (15-inches)	3	5	3	1	2	1	1	0.3	0.2	0.17
<b>Growth</b> (gill netting)										
Length Age-1	11	11	-	11	10.9		10.3	10.3	11	
Length Age-3	13.6	15.2	14.3	14.3	15.8		14.7	13.9	12.7	
<b>Condition</b> (gill netting)										
Stock	81	95	81	92	93	113	94	82	86	93
Quality	83	95	94	87	96	91	93	85	90	87
Preferred	95	99	106	83	92	90	95	91	98	95
Memorable	-	-	-	-	-	-	-			
<b>Mortality</b> (gill netting)										
Total Mortality					69		50	53	28	
<b>Stocking</b>										
#	65,830	166,434	74,930	97,392	0	63,526	157,524	92,783	255,144	253,226
#/Acre	2.9	7.4	3.3	4.3	0.0	2.8	7.0	4.1	11.3	11.3
<b>Angling Pressure</b> (creel)										
Angler Hours	39,868	69,813	45,943	32,664	30,396	28,485	20,834	31,940	21,260	16,945
Angler Hours/Acre	1.8	3.1	2.0	1.5	1.4	1.3	0.9	1.4	0.9	0.8
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	1.8	2.0	1.6	0.8	0.8	0.5	0.7	1.2	0.85	0.72
Harvest Rate (intended)	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.16
% Released	95.1	88.3	85.4	83.5	76.5	61.3	89.2	88.4	81.9	66.5
Mean Weight	1.6	1.5	1.5	1.4	1.4	1.5	1.9	1.5	1.71	1.68
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Sauger	95,600	204,340	149,700	117,340	39,470	78,680	52,920	126,870	47,330	43,630

**Walleye**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (gill netting)										
CPUE (total)	4.9	2.3	2.1	1.2	-	0.5	-	0.4	0.1	-
CPUE $\geq$ Stock	4.9	2.3	2.1	1.2	-	0.5	-	0.4	0.1	-
CPUE $\geq$ MLL (15-inches)	1.1	1.0	0.7	0.3	-	0.3	-	0.2	0.1	-
<b>Growth</b> (gill netting)										
Length Age-1	-	-	12.8	-	-	-	-	-	-	-
Length Age-3	-	-	15.8	-	-	-	-	17.6	-	-
<b>Stocking</b>										
#	254,921	73,577	130,429	68,363	108,784	145,930	206,748	151,053	103,260	94,025
#/Acre	11.3	3	6	3	5	6	9	7	5	4
<b>Angling Pressure</b> (creel)										
Angler Hours	2,445	5,046	12,910	6,304	13,659	18,530	16,081	8,520	6,337	9,094
Angler Hours/Acre	0.1	0.2	0.6	0.3	0.6	0.8	0.7	0.4	0.3	0.4
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.00	0.56	0.06	0.42	0.42	0.11	0.20	0.05	0.08	0.12
Harvest Rate (intended)	0.00	0.12	0.04	0.10	0.24	0.08	0.16	0.05	0.02	0.11
% Released	90.4	89.0	68.7	91.5	50.9	15.9	26.6	88.4	42.2	13.3
Mean Weight	1.7	1.6	2.5	2.8	2.4	3.6	3.0	1.5	3.4	3.2
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Walleye	4,330	11,610	84,400	10,410	18,530	47,260	15,870	13,920	-	-

**Striped Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Stocking</b>										
#	214,020	313,958	254,653	359,378	394,369	357,830	361,657	324,093	321,480	183,911
#/Acre	9.5	14.0	11.3	16.0	17.5	15.9	16.1	14.4	14.3	8.2
<b>Angling Pressure (creel)</b>										
Angler Hours	48,129	53,260	45,943	54,870	41,473	42,548	26,207	24,142	31,969	29,634
Angler Hours/Acre	2.1	2.4	2.0	2.4	1.8	1.9	1.2	1.1	1.4	1.3
<b>Fishing Success (creel)</b>										
Catch Rate (intended)	0.10	0.15	0.20	0.18	0.16	0.11	0.15	0.15	0.13	0.23
Harvest Rate (intended)	0.03	0.04	0.09	0.09	0.07	0.05	0.04	0.04	0.08	0.13
% Released	71.6	84.7	58.7	51.3	76.8	45.4	76.6	75.4	41.0	45.6
Mean Weight	10.39	14.69	5.34	8.13	10.19	12.52	6.36	10.57	6.42	10.87
<b>Value of Fishery (Trip Expenditures - creel)</b>										
Striped Bass	341,300	260,030	197,010	323,530	188,880	233,050	148,790	339,270	250,650	300,440

**Catfish**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all catfish)	56,258	61,934	80,475	69,273	92,060	73,631	63,160	65,420	40,067	68,848
Angler Hours/Acre	2.5	2.8	3.6	3.1	4.1	3.3	2.8	2.9	1.8	3.0
<b>Fishing Success</b> (creel)										
Catch Rate (any catfish)	0.23	0.29	0.22	0.37	0.38	0.42	0.31	0.45	0.63	0.48
Harvest Rate (any catfish)	0.2	0.27	0.17	0.32	0.22	0.27	0.18	0.26	0.54	0.37
% Released (channel)	30	33.3	38.6	26.2	42.3	29.2	46.4	44.3	24.5	28.7
Mean Weight (channel)	2.45	2.51	2.49	2.99	2.36	2.67	1.86	2.05	2.39	2.17
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Catfish	125,960	151,880	202,510	187,110	129,630	247,510	120,250	177,330	104,130	237,480

**Habitat Enhancement – 2014**

Type of Work	Details	Quantity	
		New	Renovated
Rebrush	Fish Attractors		17 sites

**Water Quality Monitoring - 2014**

Parameter	Sampling Period	Water Quality	
Temperature	July - September	Good	No thermal stratification
Dissolved Oxygen	July - September	Good	No chemical stratification

**Total Effort and Expenditures**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	633,151	849,996	1,013,566	970,509	893,724	670,816	532,271	655,796	523,113	627,743
Angler Hours Per Acre	28.1	37.8	45.0	43.1	39.7	29.8	23.7	29.1	23.2	27.9
Angler Trips	132,775	180,297	218,081	208,509	187,588	149,728	119,981	146,617	117,937	150,607
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	2,240,590	3,211,190	3,619,210	3,422,680	2,572,030	2,042,080	1,617,950	3,113,860	1,186,540	3,323,000

### J. Percy Priest Reservoir

#### Description

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**Area (acres):** 14,200      **Mean Depth (feet):** 28      **Shoreline (miles):** 265

**Counties:** Davidson, Rutherford, and Wilson

**Full Pool Elevation (feet-msl):** 490      **Winter Pool Elevation (feet-msl):** 483

**Dam Completion:** 1969

#### Summary:

J. Percy Priest Reservoir provides a variety of fishing opportunities, of which black bass fishing was the most popular in 2014 accounting for 28 % of the targeted effort. Anglers spent 117,263 hours fishing for largemouth bass and 8,414 hours fishing for smallmouth bass.

Fishing pressure on J. Percy Priest continues to be among the highest in the state with 29.5 angler hours per acre for all species, of that largemouth bass account for 8.25 angler hours per acre. Targeted catch rate for largemouth bass has remained constant in recent years ranging from 0.49 to 0.7 fish per hour. The 2014 catch rate was 0.68. This largemouth bass fishery continues to be very good despite the tremendous angling pressure. Overall abundance of largemouth bass from electrofishing was very good with mean catch per unit effort (CPUE) of 115 fish/hour. Abundance of sub-stock largemouth bass was high (17/hour). These fish should recruit to the fishery in 2016-2017. Electrofishing samples also indicated a high abundance (20/hour) of fish greater than 15 inches (minimum length limit).

Tournament bass fishing has remained a major component of this fishery. Percent effort provided by tournament and non-tournament anglers was 26 % and 74 %, respectively. Adjusted harvest by tournament anglers increased from 27% in 2013 to 41 % in 2014.

The popularity of crappie fishing closely followed bass fishing in 2014 with 27 % of the total effort, accounting for 112,385 hours of fishing for crappie on Percy Priest. Catch rates for crappie declined slightly in 2014 to 1.4 crappie/hour (1.7 crappie/hour in 2013). The lower catch rates may be indicative of weaker year classes since 2011. Trap net results in fall 2014 indicated a strong year class that should provide excellent fishing in 2016. It is concerning that black crappie make up most of the catch using trap nets, but the majority of the angler catch in creel surveys has been traditionally been white crappie. The 2014 creel survey indicated a species ratio approaching 1:1. The relative abundance of the total crappie catch in 2014 was comprised of 55 % white crappie and 45 % black crappie.

Hybrid striped bass is an important component of the Percy Priest Reservoir fishery, and annual stockings are critical to maintaining this resource. Fishing for temperate bass accounted for 33,631 angler hours in 2014 of that 25,449 were targeted hybrid (Cherokee) bass. Intended angler hours and catch rate have rebounded since the decline from weaker year classes in 2010 and 2011. Catch rates were similar to 2011 (1.8 fish/angler hour). Since these fish are completely dependent on hatchery stocking, fingerling quality is critically important to insure the success of the fishery.

Striped bass have been stocked into Percy Priest since 1968 and continue to be stocked annually. Because of water quality issues, stocking rates of striped bass have been reduced and hybrid striped bass numbers have increased. Hybrid striped bass are much more capable of coping with warmer summertime water temperatures. Striped bass are more difficult to sample with conventional sampling



gear, thus we depend on creel data to evaluate the fishery. In 2014 intended angler hours dropped to 4,457. This was an all-time low and is probably due to a switch by anglers to the more abundant hybrid as the intended species.

Management of catfish on large reservoirs is often difficult and sometimes overlooked. It is an important component to the J. Percy Priest Reservoir fishery. Even though catfishing has been declining steadily for the past 10 years, it accounted for 21,253 angler hours in 2014. This decline in popularity is difficult to explain since catch rate and mean weight have remained constant. Economic factors or the switch to another intended species may help understand this trend.

Bank fishing areas are important on Percy Priest because of the close proximity to several urban areas. These areas are popular for family fishing and recreation. Stewarts Creek and Vivrett Creek are managed with the bank fisherman in mind. Fishing piers and fishing trails are continually maintained. Fish attractors are added annually.

**Black Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
All Black Bass (hrs)	215,891	252,197	252,455	270,823	223,305	164,842	167,896	152,658	129,092	126,956
(hrs/acre)	15.2	17.8	17.8	19.1	15.7	11.6	11.8	10.8	9.1	9.2
Any Black Bass (hrs)	5,558	1,412	0	1,181	0	84	920	209	667	622
(hrs/acre)	0.4	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Largemouth Bass (hrs)	206,879	240,409	246,207	266,450	214,157	156,848	155,689	147,782	120,527	117,263
(hrs/acre)	14.6	16.9	17.3	18.8	15.1	11.0	11.0	10.4	8.5	8.3
Smallmouth Bass (hrs)	3,165	8,849	6,248	2,570	8,434	7,757	10,122	4,376	7,905	8,414
(hrs/acre)	0.2	0.6	0.4	0.2	0.6	0.5	0.7	0.3	0.6	0.6
Spotted Bass (hrs)	289	1,527	0	622	714	153	1,165	291	0	656
(hrs/acre)	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0
<b>Tournaments (all black bass)</b>										
# Tournaments (BITE)	7	4	6	4	-	-	-	-	-	-
Pounds/Angler Day (BITE)	3.17	3.04	4.81	2.32	-	-	-	-	-	-
Bass/Angler Day (BITE)	1.32	1.15	2	1.36	-	-	-	-	-	-
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	696,180	857,040	914,030	1,383,880	806,790	626,290	673,440	701,080	721,890	606,450
Any Black Bass	0	0	0	4,700	0	0	0	0	0	
Largemouth Bass	684,980	823,720	894,400	1,371,980	777,530	597,970	651,270	693,140	694,510	592,880
Smallmouth Bass	9,770	32,980	19,630	7,200	29,260	27,680	22,170	7,940	27,380	
Spotted Bass	1,430	340	0	0	0	640	0	0	0	

**Largemouth Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	14	5	16	13	10	14	12	6	8	17
<b>Density</b> (electrofishing)										
PSD	53	66	52	71	58	61	71	72	70	73
RSD (preferred)	19	23	18	22	16	17	21	20	19	20
CPUE (total)	121	82	141	85	84	118	67	107	87	115
CPUE $\geq$ Stock	107	77	125	72	74	104	55	101	79	98
CPUE $\geq$ MLL (15-inches)	21	17	24	16	13	17	11	20	15	20
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	7.4	-	-	-	-	-	-
Length Age-3	-	-	-	13.0	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	88	92	94	91	86	90	89	92	92	91
Quality	90	91	92	90	87	87	88	92	92	92
Preferred	95	94	94	96	95	94	94	91	92	92
Memorable	105	105	95	95	96	102	96	94	97	92
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	40	-	-	-	-	-	-
<b>Stocking</b>										
#	0	33,814	51,777	21,632	27,621	11,747	96,526	0	0	0
#/Acre	0.0	2.4	3.6	1.5	1.9	0.8	6.8	0.0	0.0	0.0
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.55	0.61	0.66	0.63	0.61	0.56	0.63	0.7	0.68	0.68
Harvest Rate (intended)	0.04	0.04	0.05	0.04	0.03	0.03	0.04	0.04	0.09	0.08
% Released	92.5	93	92.1	93.1	94.5	92.7	92.3	92.7	85.6	86.6
Mean Weight	2.61	2.52	2.47	2.63	2.66	2.47	1.91	2.2	2.58	2.56

**Smallmouth Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Stocking</b>										
#	22,230	0	0	26,910	12,924	0	0	0	9,741	0.0
#/Acre	1.6	0.0	0.0	1.9	0.9	0.0	0.0	0.0	0.7	0.0
<b>Fishing Success (creel)</b>										
Catch Rate (intended)	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.17	0.12	0.12
Harvest Rate (intended)	0.01	0.04	0	0	0.01	0	0	0	0	0
% Released	88.3	88.9	90.3	86.6	95.1	90.5	97	92.4	93.4	81
Mean Weight	2.84	2.6	3.38	2.09	2.7	2.78	2.17	2.02	3.32	3.75

**Spotted Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	3	1	4	4	1	5	1	0	0	0
<b>Density</b> (electrofishing)										
PSD	60	64	44	60	56	45	64	70	71	61
RSD (preferred)	4	9	4	6	11	4	2	7	9	14
CPUE (total)	47	32	31	27	38	43	42	20	17	8
CPUE $\geq$ Stock	44	31	27	23	37	39	40	20	17	8
<b>Condition</b> (spring electrofishing)										
Stock	99	99	102	97	95	92	93	96	101	94
Quality	90	90	90	94	88	88	90	92	96	93
Preferred	91	90	90	87	83	73	76	92	94	96
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.44	0.75	-	1.51	0.00	0.00	1.21	1.27	-	0.00
Harvest Rate (intended)	0.00	0.08	-	0.00	0.00	0.00	0.36	1.27	-	0.00
% Released	87.8	85.7	89.5	89.2	81.3	88.1	77.3	78.9	73.6	67.9
Mean Weight	1.12	1.06	1.04	1.01	0.91	0.79	0.92	0.93	1.18	0.90

**White Crappie**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	1.7	0.4	0.6	1.2	3.8	1.7	0.7	0.0	0.1	0.6
<b>Density</b> (trap netting (t) /electrofishing (e))										
PSD (e)	97	86	98	98	96	94	97	100	100	100
RSD (preferred) (e)	55	36	66	54	52	50	79	63	78	94
CPUE (total) (t)	2.2	0.9	1.3	1.6	4.2	2.9	1.3	1	0.2	0.8
CPUE $\geq$ Stock (t)	0.6	0.5	0.7	0.5	0.4	1.3	0.6	1	0.2	0.2
CPUE $\geq$ MLL (10-inches) (t)	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.15	0
<b>Growth</b> (spring electrofishing)										
Length Age-1	6.9	-	7.8	7.5	7.7	-	-	-	-	-
Length Age-3	10.6	10.7	10.8	10.7	10.4	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	94	99	85	102	-	-	-	-	-	93
Quality	94	99	99	107	99	-	-	94	103	
Preferred	94	99	94	105	95	-	-	90	99	98
Memorable	91	101	91	98	104	-	-	90	-	92
<b>Mortality</b> (spring electrofishing)										
Total Mortality	-	-	-	42	48	-	-	-	-	-
<b>Stocking</b>										
#	-	-	-	-	13,572	-	-	-	-	-
#/Acre	-	-	-	-	1.0	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	145,828	170,930	156,386	174,730	164,874	109,781	116,938	123,763	116,284	112,385
Angler Hours/Acre	10.3	12.0	11.0	12.3	11.6	7.7	8.2	8.7	8.2	7.9
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.53	1.02	1.23	1.28	1.56	1.4	1.72	1.93	1.64	1.4
Harvest Rate (any crappie)	0.56	0.5	0.52	0.52	0.63	0.5	0.61	0.65	0.79	0.86
% Released (white crappie)	52.5	55.7	59.4	62.3	54.4	60.7	61.3	62.9	57.7	41.3
Mean Weight (white crappie)	0.69	0.75	0.83	0.74	0.76	0.81	0.77	0.75	0.77	0.77
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	369,070	319,870	395,810	348,550	354,120	315,260	300,090	546,360	272,500	95,530

**Black Crappie**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	1.9	0.7	0.9	4	1.1	1.25	2.1	0.2	0.73	1.75
<b>Density</b> (trap netting)										
PSD	100	100	100	95	100	67	33	69	98	36
RSD (preferred)	40	70	40	22	65	39	7	15	85	10
CPUE (total)	2.3	0.9	1.1	4.2	1.5	2.1	2.8	0.5	1.1	2.8
CPUE $\geq$ Stock	0.4	0.2	0.3	0.2	0.5	0.8	0.7	0.5	0.4	1.05
CPUE $\geq$ MLL (10-inches)	0.2	0.1	0.1	0.1	0	0.3	0.1	0.1	0.2	0.1
<b>Growth</b> (trap netting)										
Length Age-2	-	-	9.1	8.8	8.9	-	-	-	-	-
Length Age-3	-	-	10.8	11.1	10.7	-	-	-	-	-
<b>Condition</b> (trap netting)										
Stock	93	102	104	107	102	-	93	85	96	97
Quality	93	109	102	114	104	-	96	91	104	96
Preferred	97	101	104	109	102	-	82	93	99	101
Memorable	92	-	-	97	95	-	89	-	90	96
<b>Stocking</b>										
#	25,430	119,895	128,514	105,303	44,980	142,268	116,288	108,216	206,437	184,617
#/Acre	1.8	8.4	9.1	7.4	3.2	10.0	8.2	7.6	14.5	8.2
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	145,828	170,930	156,386	174,730	164,874	109,781	116,938	123,763	116,284	112,385
Angler Hours/Acre	10.3	12.0	11.0	12.3	11.6	7.7	8.2	8.7	8.2	7.9
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.53	1.02	1.23	1.28	1.56	1.4	1.72	1.93	1.64	1.4
Harvest Rate (any crappie)	0.56	0.5	0.52	0.52	0.63	0.5	0.61	0.65	0.79	0.86
% Released (black crappie)	31.8	40.5	52	49.2	44.1	56.2	61.9	37.5	44.6	34.1
Mean Weight (black crappie)	0.63	0.77	0.84	0.82	0.79	0.79	0.8	0.75	0.8	0.79
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	369,070	319,870	395,810	348,550	354,120	315,260	300,090	546,360	272,500	95,530

**Bluegill**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	1.9	0.7	0.9	4	1.1	1.25	2.1	0.2	0.73	1.75
<b>Density</b> (trap netting)										
PSD	100	100	100	95	100	67	33	69	98	36
RSD (preferred)	40	70	40	22	65	39	7	15	85	10
CPUE (total)	2.3	0.9	1.1	4.2	1.5	2.1	2.8	0.5	1.1	2.8
CPUE $\geq$ Stock	0.4	0.2	0.3	0.2	0.5	0.8	0.7	0.5	0.4	1.05
CPUE $\geq$ MLL (10-inches)	0.2	0.1	0.1	0.1	0	0.3	0.1	0.1	0.2	0.1
<b>Growth</b> (trap netting)										
Length Age-2	-	-	9.1	8.8	8.9	-	-	-	-	-
Length Age-3	-	-	10.8	11.1	10.7	-	-	-	-	-
<b>Condition</b> (trap netting)										
Stock	93	102	104	107	102	-	93	85	96	97
Quality	93	109	102	114	104	-	96	91	104	96
Preferred	97	101	104	109	102	-	82	93	99	101
Memorable	92	-	-	97	95	-	89	-	90	96
<b>Stocking</b>										
#	25,430	119,895	128,514	105,303	44,980	142,268	116,288	108,216	206,437	184,617
#/Acre	1.8	8.4	9.1	7.4	3.2	10.0	8.2	7.6	14.5	8.2
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	145,828	170,930	156,386	174,730	164,874	109,781	116,938	123,763	116,284	112,385
Angler Hours/Acre	10.3	12.0	11.0	12.3	11.6	7.7	8.2	8.7	8.2	7.9
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.53	1.02	1.23	1.28	1.56	1.4	1.72	1.93	1.64	1.4
Harvest Rate (any crappie)	0.56	0.5	0.52	0.52	0.63	0.5	0.61	0.65	0.79	0.86
% Released (black crappie)	31.8	40.5	52	49.2	44.1	56.2	61.9	37.5	44.6	34.1
Mean Weight (black crappie)	0.63	0.77	0.84	0.82	0.79	0.79	0.8	0.75	0.8	0.79
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	369,070	319,870	395,810	348,550	354,120	315,260	300,090	546,360	272,500	95,530



**Striped Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (gill netting)										
Substock CPUE	0.20	-	0.00	-	-	0.00	0.10	0.17	0.00	0.00
<b>Density</b> (gill netting)										
CPUE (total)	1	-	1.3	-	-	0.1	0.1	0.17	0.16	0.3
CPUE $\geq$ Stock	0.8	-	1.3	-	-	0.1	0	0	0.16	0
CPUE $\geq$ 15-inches	0.8	-	1.3	-	-	0.1	0	0	0.08	0.3
<b>Growth</b> (gill netting)										
Length Age-2	23.1	-	21.6	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	57,624	82,008	79,631	48,885	55,665	85,038	74,116	35,340	68,748	29,898
#/Acre	4.1	5.8	5.6	3.4	3.9	6.0	5.2	2.5	4.8	2.1
<b>Angling Pressure</b> (creel)										
Angler Hours	43,796	40,631	27,894	26,829	28,263	12,665	8,388	5,465	5,898	4,457
Angler Hours/Acre	3.1	2.9	2.0	1.9	2.0	0.9	0.6	0.4	0.4	0.3
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.04	0.09	0.13	0.07	0.17	0.11	0.06	0	0.00	0.03
Harvest Rate (intended)	0.01	0.02	0.02	0.02	0.03	0.02	0.02	0	0.00	0.00
% Released	72.5	78.2	81.6	63.7	74.9	39.9	72	78.2	76.1	85.6
Mean Weight	10.66	8.82	9.34	5.66	8.23	4.28	3.6	5.2	5.9	3.56
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Striped Bass	139,630	111,180	106,180	86,640	70,800	59,600	14,060	250	430	2,750

**Catfish**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all catfish)	38,339	45,197	43,636	48,914	45,250	38,423	24,908	28,008	28,764	21,253
Angler Hours/Acre	2.7	3.2	3.1	3.4	3.2	2.7	1.8	2.0	2.0	1.5
<b>Fishing Success</b> (creel)										
Catch Rate (any catfish)	0.4	0.3	0.3	0.3	0.2	0.37	0.29	0.36	0.21	0.34
Harvest Rate (any catfish)	0.3	0.2	0.3	0.2	0.2	0.37	0.27	0.25	0.18	0.03
% Released (channel)	38	30.8	23	37	26.9	17.3	22	42.5	24.6	31.8
Mean Weight (channel)	1.75	1.52	1.65	1.58	1.92	1.71	1.67	2.07	2.06	1.76
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Catfish	162,660	133,250	84,970	134,740	123,520	60,330	79,150	103,520	77,740	8,600

**Hybrid (Cherokee) Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment (gill netting)</b>										
Age-0 CPUE	1.5	-	1.8	-	-	0.3	0.2	1.5	5.1	0.5
<b>Density (gill netting)</b>										
PSD							36	45	31	91
RSD (preferred)							0	45	29	79
CPUE (total)	13.4	-	9.8	-	-	4.5	1.1	2.8	7.3	4.75
CPUE $\geq$ Stock	13.4	-	9.5	-	-	4.3	0.9	1.3	6.9	0.42
CPUE $\geq$ 15-inches	11	-	8.1	-	-	3.7	0.6	1.3	2	3.75
<b>Growth (gill netting)</b>										
Length Age-2	20.3	-	19.1	-	-	19.0	19.3	20.3	-	19.1
Length Age-3	21.3	-	21.3	-	-	21.5	21.6	21.6	23.1	21.1
<b>Condition (gill netting)</b>										
Stock	-	95.0	-	-	-	101.0	99.0	96.0	98.7	93.8
Quality	-	-	-	-	-	93.0	96.0	-	86.3	97.5
Preferred	-	89.0	-	-	-	87.0	89.0	86.0	91.5	98.7
Memorable	-	85.0	-	-	-	81.0	84.0	91.0	97.1	93.4
<b>Stocking</b>										
#	49,793	79,046	44,685	69,600	116,448	101,665	110,734	86,407	106,598	217,459
#/Acre	3.5	5.6	3.1	4.9	8.2	7.2	7.8	6.1	7.5	15.3
<b>Angling Pressure (creel)</b>										
Angler Hours	7,093	19,762	19,343	25,669	34,072	19,732	25,819	11,721	11,419	25,449
Angler Hours/Acre	0.5	1.4	1.4	1.8	2.4	1.4	1.8	0.8	0.8	1.8
<b>Fishing Success (creel)</b>										
Catch Rate (intended)	0.35	0.40	0.29	0.52	0.48	0.28	0.18	0.08	0.40	0.38
Harvest Rate (intended)	0.16	0.17	0.11	0.14	0.18	0.14	0.14	0.01	0.12	0.11
% Released	75.6	69.3	73.6	69.4	66	56	38.8	78.2	79.9	77.9
Mean Weight	6.91	4.95	4.52	5.02	5.03	4.16	4.25	5.20	5.47	3.04
<b>Value of Fishery (Trip Expenditures - creel)</b>										
Cherokee Bass	19,700	53,830	45,740	124,720	119,300	42,330	84,970	121,520	20,350	13,610

**Habitat Enhancement – 2014**

Type of Work	Details	Quantity	
		New	Renovated
Planted	Baldcypress	4 sites, 810 trees	
Rebrushed			
Checked and Refurbished	stake beds		All Sites
Rebrushed			
Added	; Trees to Poole Knob 55 trees along shoreline.		
Installed	34 Concrete block/corregated pipe structures.	Hamilton Creek	

**Water Quality Monitoring- 2014**

Parameter	Sampling Period	Water Quality
Temperature	July to August	normal
Dissolved Oxyged	July to August	normal

**Total Effort and Expenditures**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	594,390	700,023	681,397	783,969	697,239	492,224	457,914	423,797	378,199	416,833
Angler Hours Per Acre	41.9	49.3	48.0	55.2	49.1	34.7	32.2	29.8	26.6	29.4
Angler Trips	124,442	148,614	145,615	174,502	149,723	114,955	97,370	95,113	86,277	96,782
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	1,664,060	1,919,600	1,956,150	3,422,680	1,867,870	1,359,420	1,369,540	1,925,380	1,140,920	762,360

## Normandy Reservoir

### Description

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**Area (acres):** 3,048      **Mean Depth (feet):** 36.1      **Shoreline (miles):** 72

**Counties:** Coffee and Bedford

**Full Pool Elevation (feet-msl):** 875      **Winter Pool Elevation (feet-msl):** 859

**Dam Completion:** 1976

### Summary:

In 2014, anglers fished a total of 128,907 hours (42.3 hours/acre) on Normandy Reservoir. Total fishing effort has fluctuated notably over the past six years; the 2014 effort value was the highest documented over the past ten years. The increase in total fishing effort was the result of a 60.9 % increase in the number of angler trips (2011 to 2014).

Black bass (largemouth bass, spotted bass, and smallmouth bass) were the most targeted species in Normandy Reservoir, accounting for 51.4 % of the directed angler effort in 2014. For largemouth bass, the mean relative abundance estimate of stock length largemouth bass captured during spring electrofishing samples was 41.0 fish / hour, which rated as average for Normandy Reservoir. Recruitment of largemouth bass was consistent, but slightly below average, as indicated by an electrofishing substock relative abundance value of 3.0 fish / hour. The calculated PSD value of 72.0 % indicated a balanced largemouth bass population with a moderate abundance of “quality” length and “preferred” length largemouth bass. The aforementioned indicated that the 15-inch minimum length limit has been successful at providing a quality fishery for anglers. During standard 2016 spring electrofishing surveys, largemouth bass growth rates and age structure will be determined through the collection of individuals for age analysis. This analysis occurs every ten years, and should confirm a normal largemouth bass age structure and an above average largemouth bass growth rate.

The mean total abundance of spotted bass (36.3 / hour) was slightly lower than the mean total abundance of largemouth bass (44.0 / hour). Together, these two species provide the majority of fishing opportunities for black bass anglers. Of the two species, spotted bass have been released at a lower rate (52.7 %) than largemouth bass (77.0). The mean relative abundance estimate of stock length spotted bass captured during spring electrofishing samples was 33.3 fish / hour. This value was rated as average. Recruitment of spotted bass was consistent, yet average, as indicated by an electrofishing substock relative abundance value of 3.0 fish / hour. Over the past ten years, spotted bass reproduction has been consistent; highly successful spawns were documented in 2005 and 2009. Both spawns recruited successfully. The calculated PSD value of 50.0 %, although slightly low, indicated a balanced spotted bass population with a low abundance of “preferred” length spotted bass. Calculated weight indices indicated the condition of spotted bass to be “excellent.” The elevated relative weight of spotted bass was the result of an abundance of forage, especially threadfin shad. During standard 2016 spring electrofishing surveys, spotted bass growth rates and age structure will also be determined through the collection of individuals for age analysis. This analysis occurs every ten years, and should confirm a normal spotted bass age structure and an above average spotted bass growth rate.

**Summary:**

Rocky substrate, which is the preferred habitat of smallmouth bass, is the least abundant habitat type found in Normandy Reservoir. Additionally, since Normandy Reservoir is a highly productive reservoir, water clarity is consistently low. Therefore, as a result of limited habitat and low water clarity, smallmouth bass persist at a minimal level of abundance. Documented total relative abundance of smallmouth bass over the past three years has ranged from 1.0 to 3.0 fish / hour. Lastly, since smallmouth bass are not prevalent, directed angler effort for smallmouth bass is extremely low compared to directed angler effort for largemouth bass. Supplemental stockings of smallmouth bass have occurred sporadically over the past ten years, with stocking rates ranging from 0.3 / acre to 6.6 / acre. Post stocking evaluations and creel data have indicated that these stockings have not enhanced the smallmouth bass fishery of Normandy Reservoir.

The black crappie and white crappie fisheries combined (hereafter crappie fishery) comprised the second most popular fishery on Normandy Reservoir. Directed effort for crappie was approximately 21.2 % of the total angler directed effort. Assessing crappie reproduction on Normandy Reservoir has been, and continues to be, problematic. As a result, the primary means of assessing the crappie population has been by creel data. Creel data (2014) indicated a 31.1 % increase in angler hours per acre.

Furthermore, the angler catch rate of 1.67 crappie / hour was the highest documented over the past ten years, and rated as “above average.” The mean weight of crappie ranged from 0.70 to 0.97 lbs. per crappie. The documented mean weight range was rated as “good.” The effect of variable recruitment has been documented in the white crappie population, and continues to be a management issue. White crappie reproduction is sporadic, with successful spawns occurring every four to six years. Black crappie reproduction is less sporadic, and has been, and continues to be, bolstered by yearly stockings. Over the past three years, black crappie stocking rates have exceeded 28.0 fish / acre. Recruitment of stocked crappie has been documented by creel data (the 2014 catch rate of crappie was the highest documented over the previous ten years). Based on the current status of the crappie fishery, anglers have been satisfied with the 10.0 inch minimum length limit, have been experiencing higher catch rates, and have been harvesting crappie at a slightly higher rate than normal above the minimum length limit.

The initial stocking of walleye into Normandy Reservoir occurred in 2007; over the past seven years, one major walleye stocking event per year has occurred. Stocking rates of walleye have ranged from 21.0 / acre to 37.9 / acre over the past eight years. The mean relative abundance estimate of stock length walleye captured during fall gill net samples was 8.2 fish / hour, which rated as average for Normandy Reservoir. Since consecutive yearly stockings have occurred since 2007, recruitment of walleye has been very consistent. Over the past three years, the abundance of age-0 walleye has ranged from 0.8 to 2.2 / hour. Although these values are slightly low, they are indicative of consistent yearly recruitment of stocked walleye. The calculated PSD value of 69.2 % indicated a slightly out-of-balance walleye population with an elevated abundance of “quality” length and “preferred” length walleye. The aforementioned indicated that the 16-inch minimum length limit has been successful at providing a quality walleye fishery for anglers. During standard gill net samples, walleye growth rates (mean length at age) have been determined for all walleye collected over the previous eight years. Based on this data, mean length at age for age-1 and age-3 walleye has declined over the previous three years (approximately 1.0 inch less for both age-1 and age-3 walleye). Over the same three year period (2012—2014), an elevated stocking rate (2012) had been employed, which may have affected the documented growth rates. Calculated condition factors have also decreased (since 2013), with ratings declining from “good” to “fair.” Since 2011, angling pressure has increased modestly; conversely, the percent of walleye released by anglers has decreased by 18.3 % since 2009. The decreasing release rate coincides with an increasing abundance of quality and preferred length walleye in the Normandy Reservoir walleye population.

**Summary:**

Habitat enhancements on Normandy Reservoir by the southern reservoir crew of region two was moderate in 2014. Extensive work on Normandy Reservoir occurs every other year on a two year rotational basis with the other two southern reservoirs (Woods and Normandy Reservoirs / Tims Ford Reservoir). A total of 206 bald cypress trees were planted at four different sites to stabilize shorelines and provide nursery habitat for fish (as the cypress trees mature). Christmas trees are regularly added to marked shallow and deep water sites to provide attractors for mature fish to concentrate around for exploitation by anglers. In 2014, twelve marked fish attractor sites were rebrushed with twelve Christmas trees per site. Artificial fish attractors placed into Normandy Reservoir in 2014 at new locations included eight pallet attractors and one hundred twenty-five twin corrugated pipe structures. Spawning benches (for black bass spawning) and stake beds (to concentrate crappie) were not placed into the reservoir in 2014. Spawning benches and stake beds are scheduled to be placed into Normandy Reservoir in 2016.



**Lakewide Angling Summary, Normandy Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	58,915	47,007	x	35,387	43,316	98,443	53,464*	x	x	128,907
Angler Hours Per Acre	19	15.0	x	12.0	14.0	32.0	18*	x	x	42.3
Angler Trips	12,408	9,631	x	7,260	8,561	18,601	9,823*	x	x	25,165
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	256,280	x	x	x	265,850	541,540	179,430*	x	x	555,030

**Black Bass, Normandy Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
All Black Bass (hrs)	27,124	21,781	x	18,353	19,629	36,459	20889*	x	x	66,208
(hrs/acre)	8.9	7.1	x	6.0	6.4	11.9	6.9	x	x	21.7
Any Black Bass (hrs)	26,529	21,579	x	18,176	17,973	32,382	20,320	x	x	64,990
(hrs/acre)	8.7	7.1	x	5.9	5.9	10.6	6.7	x	x	21.3
Largemouth Bass (hrs)	449	202	x	177	866	2,782	42*	x	x	94
(hrs/acre)	0.1	0.1	x	0.1	0.3	0.9	0.0	x	x	0.0
Smallmouth Bass (hrs)	x	x	x	x	x	94	34*	x	x	x
(hrs/acre)	x	x	x	x	x	0.0	0.0	x	x	x
Spotted Bass (hrs)	146	x	x	x	790	1,201	493*	x	x	1,124
(hrs/acre)	0.0	x	x	x	0.3	0.4	0.2	x	x	0.4
<b>Tournaments (all black bass)</b>										
# Tournaments (BITE)	x	x	x	x	x	x	x	x	x	x
Pounds/Angler Day (BITE)	x	x	x	x	x	x	x	x	x	x
Bass/Angler Day (BITE)	x	x	x	x	x	x	x	x	x	x
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	156,900	x	x	x	151,920	238,570	103,170	x	x	358,700
Any Black Bass	156,030	x	x	x	142,150	216,660	102,590	x	x	354,820
Largemouth Bass	870	x	x	x	5,650	31,200	x*	x	x	100
Smallmouth Bass	x	x	x	x	x	x	x*	x	x	x
Spotted Bass	x	x	x	x	4,120	710	580*	x	x	3,780

**Largemouth Bass, Normandy Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	5	9	2	0	0	3	3	4	3	3
<b>Density</b> (electrofishing)										
PSD	76	64	75	89	95	x	10	78	85	72
RSD (preferred)	36	35	31	67	68	40	42	37	53	46
CPUE (total)	46	48	30	23	68	47	36	60	46	44
CPUE $\geq$ Stock	41	39	28	23	18	44	33	55	44	41
CPUE $\geq$ MLL (15-inches)	15	17	9	15	13	18	14	19	23	19
<b>Growth</b> (electrofishing)										
Length Age-1	x	x	x	x	x	x	x	x	x	x
Length Age-3	x	x	x	x	x	x	x	x	x	x
<b>Condition</b> (spring electrofishing)										
Stock	90	96	101	105	*	98	88	x	92	94
Quality	94	96	99	101	92	98	93	93	95	95
Preferred	103	100	99	103	99	95	83	83	92	97
Memorable	94	99	113	108	101	100	80	82	94	77
<b>Mortality</b> (electrofishing)										
Total Mortality	x	x	x	x	x	x	x	x	x	x
<b>Stocking</b>										
#	0	0	0	0	0	0	27,072	0	0	5967
#/Acre	0.0	0.0	0.0	0.0	0.0	0.0	8.9	0.0	0.0	2.0
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.16	0.52	x	0.28	0.12	0.56	0	x	x	0.5
Harvest Rate (intended)	0	0	x	0	0.02	0.08	0	x	x	0
% Released	86.1	77.8	x	81.4	87.2	78.4	92.3*	x	x	77
Mean Weight	3.8	2.8	x	3	3	3.4	2.8*	x	x	2.46
<b>Value of Fishery</b> (Trip Expenditures)										
Largemouth Bass	870	x	x	x	5650	31200	x*	x	x	100.00

**Smallmouth Bass, Normandy Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	*	*	*	*	*	*	*	1	0	3
<b>Density</b> (electrofishing)										
PSD	*	*	*	*	*	*	*	67	100	78
RSD (preferred)	*	*	*	*	*	*	*	33	100	56
CPUE (total)	*	*	*	*	*	*	*	3	1	3
CPUE $\geq$ Stock	*	*	*	*	*	*	*	2	1	3
CPUE $\geq$ MLL (18-inches)	*	*	*	*	*	*	*	0	0	0
<b>Growth</b> (electrofishing)										
Length Age-1	*	*	*	*	*	*	*	x	x	x
Length Age-3	*	*	*	*	*	*	*	x	x	x
<b>Condition</b> (spring electrofishing)										
Stock	*	*	*	*	*	*	*	x	x	76
Quality	*	*	*	*	*	*	*	x	x	88
Preferred	*	*	*	*	*	*	*	x	80	75
Memorable	*	*	*	*	*	*	*	x	x	77
<b>Mortality</b> (electrofishing)										
Total Mortality	*	*	*	*	*	*	*	x	x	x
<b>Stocking</b>										
#	0	20,065	1,800	1,556	0	4,240	0	0	3,904	14390
#/Acre	0.0	6.6	0.6	0.5	0.0	1.4	0.0	0.0	0.3	4.7
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	x	x	x	x	x	0	0	x	x	x
Harvest Rate (intended)	x	x	x	x	x	0	0	x	x	x
% Released	91.9	55.4	x	88.7	84.9	*	100	x	x	91
Mean Weight	*	*	x	*	*	*	*	x	x	3.03
<b>Value of Fishery</b> (Trip Expenditures)										
Smallmouth Bass	x	x	x	x	x	x	x*	x	x	x

**Spotted Bass, Normandy Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	4	9	2	1	2	15	3	3	1	3
<b>Density</b> (electrofishing)										
PSD	71	49	71	80	68	x	20	58	89	50
RSD (preferred)	42	24	29	36	45	25	33	19	36	15
CPUE (total)	20	42	23	16	13	39	18	28	16	36
CPUE $\geq$ Stock	16	32	21	15	10	24	20	25	15	33
CPUE $\geq$ MLL (15-inches)	*	*	*	*	*	*	*	1	2	1
<b>Growth</b> (electrofishing)										
Length Age-1	x	x	x	x	x	x	x	x	x	x
Length Age-3	x	x	x	x	x	x	x	x	x	x
<b>Condition</b> (spring electrofishing)										
Stock	98	110	104	100	103	103	100	x	107	103
Quality	104	105	*	100	105	104	104	x	100	101
Preferred	108	*	*	102	100	101	92	x	92	97
Memorable	117	*	*	*	*	*	*	x	x	x
<b>Mortality</b> (electrofishing)										
Total Mortality	x	x	x	x	x	x	x	x	x	x
<b>Stocking</b>										
#	0	0	0	0	0	0	0	0	0	0
#/Acre	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.21	x	x	x	0.88	0.74	1.1	x	x	0.68
Harvest Rate (intended)	0	x	x	x	0.51	0.49	0.07	x	x	0.57
% Released	73.2	69.3	x	66.5	75.3	68.4	84.0*	x	x	52.7
Mean Weight	1.7	1.4	x	1.2	1.3	1.3	1.4*	x	x	1.31
<b>Value of Fishery</b> (Trip Expenditures)										
Spotted Bass	x	x	x	x	x	x	x	x	x	x

**White Crappie, Normandy Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	x	x	x	x	x	x	x	x	x	x
<b>Density</b> (trap netting (t) /electrofishing (e))*										
PSD (e)*	93	99	100	100	0	x	x	100	x	x
RSD (preferred) (e)*	58	92	50	100	0	50	x	67	x	x
CPUE (total) (t)*	x	x	x	x	x	x	x	x	x	x
CPUE ≥ Stock (t)*	x	x	x	x	x	x	x	x	x	x
CPUE ≥ MLL (10-inches) (t)*	x	x	x	x	x	x	x	x	x	x
<b>Growth</b> (spring electrofishing)										
Length Age-1	*	x	x	x	x	x	x	x	x	x
Length Age-3	10.1	x	x	x	x	x	x	x	x	x
<b>Condition</b> (spring electrofishing)										
Stock	98	76	98	x	x	84	108	x	x	x
Quality	96	86	x	x	x	94	x	106	x	x
Preferred	97	86	x	99	x	x	108	x	x	x
Memorable	95	87	x	101	x	75	x	89	x	x
<b>Mortality</b> (spring electrofishing)										
Total Mortality	*	x	x	x	x	x	x	x	x	x
<b>Stocking</b>										
#	19,774	0	6,887	19,761	0	0	0	0	0	0
#/Acre	6.5	0.0	2.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	19,582	19,147	x	11,329	14,795	19,803	18774*	x	x	27,301
Angler Hours/Acre	6.4	6.3	x	3.7	4.9	6.5	6.2	x	x	9.0
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	0.7	0.8	x	0.7	0.7	0.75	1.3*	x	x	1.67
Harvest Rate (any crappie)	0.4	0.4	x	0.3	0.4	0.3	0.5*	x	x	0.7
% Released (w hite crappie)	17.2	12.6	x	8	34.6	22.9	65.8*	x	x	64.9
Mean Weight (w hite crappie)	0.8	0.9	x	1	1	1	.96*	x	x	0.7
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	91,540	x	x	x	111,840	46,040	52,620	x	x	109,380

**Black Crappie, Normandy Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	x	x	x	x	x	x	x	x	x	x
<b>Density</b> (trap netting (t) /electrofishing (e))*										
PSD (e)*	93	81	x	100	x	x	x	100	43	75
RSD (preferred) (e)*	58	71	x	88	x	100	50	100	43	50
CPUE (total) (t)*	x	x	x	x	x	x	x	x	x	x
CPUE $\geq$ Stock (t)*	x	x	x	x	x	x	x	x	x	x
CPUE $\geq$ MLL (10-inches) (t)*	x	x	x	x	x	x	x	x	x	x
<b>Growth</b> (spring electrofishing)										
Length Age-1	*	x	x	x	x	x	x	x	x	x
Length Age-3	11.2	x	x	x	x	x	x	x	x	x
<b>Condition</b> (spring electrofishing)										
Stock	99	95	x	x	x	101	96	x	111	148
Quality	93	93	94	119	x	x	98	x	x	102
Preferred	93	119	90	x	x	x	106	96	x	111
Memorable	90	88	85	92	x	x	84	x	86	89
<b>Mortality</b> (spring electrofishing)										
Total Mortality	*	*	*	*	*	*	*	x	x	x
<b>Stocking</b>										
#	0	0	0	0	0	0	0	0	0	0
#/Acre	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	19,582	19,147	x	11,329	14,795	19,803	18774*	x	x	27,301
Angler Hours/Acre	6.4	6.3	x	3.7	4.9	6.5	6.2*	x	x	9.0
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	0.7	0.8	x	0.7	0.7	0.75	1.3*	x	x	1.67
Harvest Rate (any crappie)	0.4	0.4	x	0.3	0.4	0.3	.5*	x	x	0.7
% Released (black crappie)	4.8	2.4	x	5.6	68.1	30.8	55*	x	x	48.4
Mean Weight (black crappie)	1	1.2	x	1.2	1	0.9	.87*	x	x	0.95
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	91,540	x	x	x	111,840	46,040	52,620	x	x	109,380

**Blacknose Crappie, Normandy Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	x	x	x	x	x	x	x	x	x	x
<b>Density</b> (trap netting (t) /electrofishing (e))*										
PSD (e)*	78	75	100	92	100	x	x	73.3	66.3	92.9
RSD (preferred) (e)*	48	21	100	68	79	79	54	58	50	63
CPUE (total) (t)*	x	x	x	x	x	x	x	x	x	x
CPUE ≥ Stock (t)*	x	x	x	x	x	x	x	x	x	x
CPUE ≥ MLL (10-inches) (t)*	x	x	x	x	x	x	x	x	x	x
<b>Growth</b> (spring electrofishing)										
Length Age-1	*	x	x	x	x	x	x	x	x	x
Length Age-3	11.2	x	x	x	x	x	x	x	x	x
<b>Condition</b> (spring electrofishing)										
Stock	98	91	*	107	x	93	98	99	110	92
Quality	100	91	98	108	105	x	102	102	110	99
Preferred	100	88	89	x	104	94	105	93	99	99
Memorable	93	88	90	100	96	90	92	92	94	97
<b>Mortality</b> (spring electrofishing)										
Total Mortality	*	x	x	x	x	x	x	x	x	x
<b>Stocking</b>										
#	18,551	37,502	35,185	46,543	128,332	49,115	75,919	93,491	86,629	103,887
#/Acre	6.1	12.3	11.5	15.3	42.1	16.0	24.9	30.7	28.4	34.1
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	19,582	19,147	x	11,329	14,795	19,803	18774*	x	x	27,301
Angler Hours/Acre	6.4	6.3	x	3.7	4.9	6.5	6.2*	x	x	9.0
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	0.7	0.8	x	0.7	0.7	0.75	1.3*	x	x	1.67
Harvest Rate (any crappie)	0.4	0.4	x	0.3	0.4	0.3	.5*	x	x	0.7
% Released (blacknose crappie)	5.8	32.9	x	21.3	47.2	56.9	63.2	x	x	63.8
Mean Weight (blacknose crappie)	1.2	1.1	x	1.3	1	1	.87*	x	x	0.97
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	91,540	x	x	x	111,840	46,040	52,620	x	x	109,380



**Walleye, Normandy Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (gill netting)										
Age-0 CPUE	0	0	1.3	0	1	0.7	0	1.4	0.75	2.2
<b>Density</b> (gill netting)										
PSD	*	*	*	*	*	*	*	82.7	86.7	69.7
RSD (preferred)	*	*	*	*	*	*	*	10	13	14
CPUE (total)	0	0	1.3	16	14	9	14	8.6	8.16	8.25
CPUE $\geq$ Stock	0	0	0	15	13	9	10.5	8.6	8.16	8.25
CPUE $\geq$ 16-inches	0	0	0	1	11	6	7	5.8	5.8	4.92
<b>Growth</b> (gill netting)										
Length Age-1	x	x	x	x	16.6	15.6	*	16.7	16.3	15.9
Length Age-3	x	x	x	x	21.7	20.7	*	20.9	19.9	19.7
<b>Condition</b> (gill netting)										
Stock	x	x	x	x	100.0	91.0	96.0	91.0	100.0	92.4
Quality	x	x	x	x	94.0	90.0	94.0	87.9	94.8	87.8
Preferred	x	x	x	x	87.0	85.0	92.0	84.0	90.1	82.5
Memorable	x	x	x	x	x	x	x	x	x	x
<b>Stocking</b>										
#	0	0	64,790	64,781	108,688	64,117	89,391	86,961	58,771	115,421
#/Acre	0.0	0.0	21.0	21.0	36.0	21.0	29.0	28.5	19.3	37.9
<b>Angling Pressure</b> (creel)										
Angler Hours	x	0	x	117	1,717	12,884	3275*	x	x	8,759
Angler Hours/Acre	x	0.0	x	0.0	0.6	4.2	1.1*	x	x	2.5
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.00	0.00	x	0.00	0.40	0.20	0.4*	x	x	0.34
Harvest Rate (intended)	0.00	0.00	x	0.00	0.10	0.15	0.36*	x	x	0.17
% Released	0	0	x	0	77.9	28	12.8*	x	x	63.6
Mean Weight	x	x	x	x	2.30	2.60	2.4*	x	x	2.57
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Walleye	x	x	x	x	980	146,420	9260*	x	x	24,950

**2014 Habitat Enhancement - Normandy Reservoir**

Type of Work	Details	Quantity	
		New	Renovated
Planted	Cypress Trees to Existing Sites	206 Trees, 4 Sites	
Rebrushed	Cedar Trees to Established Bouy Sites	144 Trees, 12 Sites	
Checked and Refurbished			
Rebrushed			
Added	Pallet and Corrugated Pipe Structures	8 Pallet, 125 Pipe	
Installed			

**2014 Water Quality Monitoring - Normandy Reservoir**

Parameter	Sampling Period	Water Quality
Temperature	July to August	normal
Dissolved Oxyged	July to August	normal

## Tims Ford Reservoir

### Description

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**Area (acres):** 10,600      **Mean Depth (feet):** 28      **Shoreline (miles):** 265

**Counties:** Franklin and Coffee

**Full Pool Elevation (feet-msl):** 888      **Winter Pool Elevation (feet-msl):** 860

**Dam Completion:** 1970

### Summary:

A yearly creel survey has not been conducted on Tims Ford Reservoir since 2011. The current creel methodology is to conduct a creel survey on one reservoir for a period of four consecutive years, and then redirect the creel survey to the remaining two reservoirs for a period of four consecutive years. Based on the results of the last creel survey conducted on Tims Ford Reservoir, anglers spent a total of 45,491 hours (4.0 hours / acre) fishing Tims Ford Reservoir. Since 2005, fishing effort has declined by approximately 67.9 %; the exact reason for the notable decline could not be ascertained. The data collected during the next creel survey period will indicate whether or not the decline in fishing effort is continuing.

Based on the results of the last creel survey (conducted in 2011), black bass accounted for approximately 56.2 % of directed angler effort. The black bass fishery of Tims Ford is comprised of two primary fisheries: largemouth bass and smallmouth bass. Spotted bass have occasionally been collected during standard spring electrofishing samples, but this population persists only at a minimal level. For the most abundant black bass (largemouth bass), the density estimate of stock length largemouth bass collected during 2014 electrofishing samples (27.3 fish / hour) was rated as "average." Based on the substock abundance estimate of 3.3 fish / hour, largemouth bass recruitment was rated as "low." The substock abundance estimates from the previous ten years displayed only minimal year-to-year variation, with the exception of the 2006 substock abundance estimate. In 2006, the substock abundance estimate was 62.5 % higher than the other nine years, and indicated a strong 2005 year class. A PSD of 87 indicated the largemouth population to be "out-of-balance," mainly as a result of an increase in largemouth bass > 15.0 inches. The increase in abundance of largemouth bass > 15.0 inches over the past two years has been the result of successful recruitment and anglers abiding by the fifteen inch minimum length limit. Length frequency data indicated the continued existence of a quality largemouth bass population. Future age data, which will be collected in 2016, will be utilized to confirm that acceptable growth and age structure exists in the largemouth bass population of Tims Ford.

The clearness of the water and a prevalence of cobble / boulder substrate, which comprise large areas of the middle and lower reaches of the reservoir, provide ideal habitat for smallmouth bass. Although directed angler effort for smallmouth bass is less than that for largemouth bass, the fact that some anglers fish for smallmouth bass specifically indicates the relevance of this fishery to anglers. The habitat utilized by smallmouth bass makes obtaining a representative sample through electrofishing or other methods problematic. Therefore, creel data is the primary data utilized to assess this fishery. Based on the last year of creel data (2011), the harvest rate of smallmouth was very low; the percent of smallmouth bass that were released was approximately ninety-seven percent. The mean weight of harvested smallmouth was 3.30 pounds. The aforementioned indicated that fish above the 18" minimum length limit were available and were being utilized by anglers. Additionally, based on age data collected during the

**Summary:**

spring of 2014, the abundance of sub-legal length smallmouth bass (16.0 – 18.0 inches) was elevated (indicating that the minimum length limit regulation has been effective). Based on the results of the 2014 age sample, a total of nine year classes were detected (age-2 to age-10); missing age groups were not detected. Weighted mean length at age-3 was 12.4 inches; smallmouth bass did not reach 18.0 inches in length until age-6. Therefore, the growth rate of smallmouth bass was considered slow. Calculated mean weights indicated smallmouth bass to be in fair condition. Since the current age sample indicated consistent natural reproduction, hatchery stockings of smallmouth bass are not required. If inconsistent natural reproduction is documented, hatchery stockings would be considered as a management option.

The black crappie and white crappie fisheries combined (hereafter crappie fishery) comprised the second most popular fishery of Tims Ford Reservoir. Directed effort for crappie was approximately 8.2 % of the total angler directed effort. Assessing crappie reproduction on Tims Ford Reservoir has been, and continues to be, problematic. As a result, the primary means of assessing the crappie population has been by creel data. The last creel data was collected in 2011; this data indicated a 60.0 % decrease in angler hours per acre since the previous year. Furthermore, the angler catch rate of 2.02 crappie / hour was the highest documented catch rate over the previous five creel surveys, and rated as “above average.” The mean weight of crappie ranged from 0.7 to 1.0 pounds per crappie. The documented mean weight range was rated as “good.” The effect of variable recruitment has been documented in the crappie population, and continues to be a management issue. Crappie reproduction is sporadic, with successful spawns occurring every four to six years. As a result, crappie reproduction has been, and continues to be, bolstered by yearly stockings. Over the past three years, black crappie stocking rates have exceeded 10.0 fish / acre. White crappie stockings have not occurred over the past ten years because of the difficulty in procuring white crappie brood fish. Recruitment of stocked crappie has been documented by creel data; this data has indicated a 74.3 % increase in catch rate over the past four creel surveys. Based on the current status of the crappie fishery, anglers have been satisfied with the 10.0 inch minimum length limit, have been experiencing higher catch rates, and have been harvesting crappie at a slightly higher rate than normal above the minimum length limit.

The hybrid bass fishery in Tims Ford Reservoir has been increasing in popularity over the past ten years. Both local and out-of-state anglers (from Alabama) have been increasingly pursuing hybrid bass, with many out-of-state anglers using local guide services to help them find and capture hybrid bass. Based on numerous years of forage base data, Tims Ford Reservoir has a moderate abundance of alewife and gizzard shad; threadfin shad abundance continues to display high year-to-year variability. Therefore, the stocking rate of hybrid bass must be closely monitored. The hybrid bass population continues to be monitored yearly through the use of horizontal gill nets. Based on the gill net data collected during 2014, the hybrid striped bass population displayed consistent year-to-year recruitment. The fifteen inch minimum length limit continues to be effective in producing an elevated abundance of hybrids in the fourteen inch length class. Total relative abundance was less than three hybrids per net night; this value has not varied significantly over the past four years. The 2014 age sample (additionally generated from the 2014 gill net samples) indicated hybrids exceeded twenty inches by age-2, and twenty-one inches by age-3. Growth rates for both age classes rated as “average” and did not vary appreciably from other middle Tennessee populations. Creel data (2011) indicated angling pressure to be “light”, with angler catch rate the highest documented over the past five creel survey periods. Harvest rate of hybrids was low; the percentage of hybrids released exceeded ninety-three percent. Mean weight of hybrids exceeded three and a half pounds; this value was the lowest recorded mean weight since 2005.

**Summary:**

Initially to exploit the abundant clupeid populations, striped bass have been stocked into Tims Ford Reservoir for numerous decades. Since the equipment and fishing methods are similar, anglers who target hybrid bass also target stripers. As opposed to gill net monitoring of hybrid bass, gill net monitoring of striped bass has been, and continues to be, an ineffective method. Therefore, creel data has historically been utilized to assess the status of the striped bass fishery. Reported angler catch and harvest rates (2011) of adult striped bass were low, with both values being only slightly above zero. The release rate of striped bass was greater than 85.0 %; mean weight was just above four pounds. The 2011 mean weight value was rated as low, and was 44.0 % less than the mean weight value recorded in 2005. In 2014, 29,470 striped bass fingerlings were stocked into Tims Ford Reservoir. In three of the last four years, stocking rates have remained fairly consistent at 2.8 striped bass per acre.

Stocking of walleye into Tims Ford Reservoir has been occurring yearly over the past two decades. In 2007, as a result of production issues, walleye were not stocked into Tims Ford Reservoir. Based on the length of the stocked fingerlings, the total number of stocked walleye can vary greatly. Stocking rates of walleye have ranged from 7.0 / acre to 16.9 / acre over the past ten years. The mean relative abundance estimate of stock length walleye captured during fall gill net samples was 3.7 fish / hour, which rated as average for Tims Ford Reservoir. Since consecutive yearly stockings have occurred since 2007, recruitment of walleye has been very consistent. Over the past two years, the abundance of age-0 walleye has ranged from 0.4 to 1.7 / hour. Although these values are slightly low, they are indicative of consistent yearly recruitment of stocked walleye. The calculated PSD value of 65.7 % indicated a slightly out-of-balance walleye population with an elevated abundance of “quality” length and “preferred” length walleye. The aforementioned indicated that the 16-inch minimum length limit has been successful at providing a quality walleye fishery for anglers. During standard gill net samples, walleye growth rates (mean length at age) have been determined for all walleye collected over the previous eight years. Based on this data, mean length at age for age-1 and age-3 walleye has remained consistent over the previous three years. Over the same three year period (2012—2014), fairly uniform stocking rates had been employed. The consistency in stocking rates resulted in the three year uniformity in growth rates. Calculated condition factors indicated walleye to be in “good” to “fair” condition. Since 2010, angling pressure has decreased moderately; additionally, the percent of walleye released by anglers has decreased by 69.2 % since 2007. The decreasing release rate coincides with an increasing abundance of quality and preferred length walleye in the Tims Ford Reservoir walleye population.

Habitat enhancements on Tims Ford Reservoir by the southern reservoir crew of region two were limited in 2014. Extensive work on Tims Ford Reservoir occurs every other year on a two year rotational basis with the other two southern reservoirs (Woods and Normandy Reservoirs / Tims Ford Reservoir). A total of 102 bald cypress trees were planted at three different sites to stabilize shorelines and provide nursery habitat for fish (as the cypress trees mature). Christmas trees are regularly added to marked shallow and deep water sites to provide attractors for mature fish to concentrate around for exploitation by anglers. In 2014, marked fish attractor sites were not rebrushed. Additionally, artificial fish attractors were not placed into Tims Ford Reservoir in 2014. Spawning benches (for black bass spawning), stake beds (to concentrate crappie), Christmas trees (to concentrate fish), and cypress trees (nursery habitat) are scheduled to be placed into Tims Ford Reservoir in 2015.

**Lakewide Angling Summary, Tims Ford Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	141,702	x	80,673	56,407	x	85,254	45,491*	x	x	x
Angler Hours Per Acre	13	x	8.0	5.0	x	8.0	4*	x	x	x
Angler Trips	30,225	x	15,238	11,642	x	17,234	8,272*	x	x	x
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	746,810	x	x	x	x	815,790	102,870*	x	x	x

**Black Bass, Tims Ford Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
All Black Bass (hrs)	50,011	x	48,309	26,982	x	30,917	25,586*	x	x	x
(hrs/acre)	4.7	x	4.6	2.5	x	2.9	2.4	x	x	x
Any Black Bass (hrs)	40,146	x	48,116	26,671	x	22,858	23,454	x	x	x
(hrs/acre)	3.8	x	4.5	2.5	x	2.2	2.2	x	x	x
Largemouth Bass (hrs)	321	x	x	97	x	2,794	x	x	x	x
(hrs/acre)	0.0	x	x	0.0	x	0.3	x	x	x	x
Smallmouth Bass (hrs)	9,544	x	193	214	x	5,265	1,944 *	x	x	x
(hrs/acre)	0.9	x	0.0	0.0	x	0.5	0.2	x	x	x
Spotted Bass (hrs)	x	x	x	x	x	x	188*	x	x	x
(hrs/acre)	x	x	x	x	x	x	0.0	x	x	x
<b>Tournaments (all black bass)</b>										
# Tournaments (BITE)	x	x	x	x	x	x	x	x	x	x
Pounds/Angler Day (BITE)	x	x	x	x	x	x	x	x	x	x
Bass/Angler Day (BITE)	x	x	x	x	x	x	x	x	x	x
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	362,720	x	x	x	x	249,500	90,450*	x	x	x
Any Black Bass	274,600	x	x	x	x	136,590	88,120	x	x	x
Largemouth Bass	1,880	x	x	x	x	32,720	x	x	x	x
Smallmouth Bass	86,240	x	x	x	x	80,190	2,330*	x	x	x
Spotted Bass	x	x	x	x	x	x	x	x	x	x

**Largemouth Bass, Tims Ford Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	3	8	2	2	2	2	2	3	2	3
<b>Density</b> (electrofishing)										
PSD	64	82	80	85	82	77	21	73	83	87
RSD (preferred)	33	42	41	42	58	40	26	34	37	46
CPUE (total)	33	33	35	15	16	31	13	41	31	39
CPUE $\geq$ Stock	30	28	34	13	15	29	16	38	29	35
CPUE $\geq$ MLL (15-inches)	10	12	13	6	5	11	4	12	11	15
<b>Growth</b> (electrofishing)										
Length Age-1	x	x	x	x	x	x	x	x	x	x
Length Age-3	x	x	x	x	x	x	x	x	x	x
<b>Condition</b> (spring electrofishing)										
Stock	87	85	97	88	85	86	88	83	84	76
Quality	90	81	92	83	84	87	91	89	84	85
Preferred	90	80	87	82	84	84	90	74	86	84
Memorable	86	x	x	x	87	91	82	74	83	77
<b>Mortality</b> (electrofishing)										
Total Mortality	x	x	x	x	x	x	x	x	x	x
<b>Stocking</b>										
#	2400	2,826	0	0	0	8,716	0	0	0	0
#/Acre	0.2	0.3	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.21	x	x	0	x	0.57	x	x	x	x
Harvest Rate (intended)	0	x	x	0	x	0.02	x	x	x	x
% Released	96	x	84	86.8	x	85.2	94.3*	x	x	x
Mean Weight	2.5	x	2.6	2.2	x	2.3	2.3*	x	x	x
<b>Value of Fishery</b> (Trip Expenditures)										
Largemouth Bass	1,880	x	x	x	x	32,720	x	x	x	x



**Smallmouth Bass, Tims Ford Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	1	0	1	0	0	3	3	1	0	0
<b>Density</b> (electrofishing)										
PSD	81	79	78	63	80	78	42	61	86	82
RSD (preferred)	55	48	50	13	65	66	38	42	52	72
CPUE (total)	12	14	18	2	5	10	4	9	14	9
CPUE $\geq$ Stock	11	14	17	2	4	7	3	8	14	9
CPUE $\geq$ MLL (18-inches)	2	2	2	0	3	5	1	1	2	1
<b>Growth</b> (electrofishing)										
Length Age-1	5.1	x	x	x	x	x	x	x	x	x
Length Age-3	13.6	x	x	x	x	x	x	x	x	x
<b>Condition</b> (spring electrofishing)										
Stock	92	88	x	91	*	78	79	81	89	82
Quality	88	81	x	77	*	83	88	78	83	75
Preferred	77	80	68	82	*	77	85	70	76	73
Memorable	84	73	68	x	*	80	76	63	68	74
<b>Mortality</b> (electrofishing)										
Total Mortality	58	x	x	x	x	x	x	x	x	x
<b>Stocking</b>										
#	0	0	0	0	0	0	0	0	0	0
#/Acre	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.48	x	0	0.47	x	0.46	0.77	x	x	x
Harvest Rate (intended)	0	x	0	0	x	0.01	0.02	x	x	x
% Released	94.3	x	94.8	94	x	96.4	96.9	x	x	x
Mean Weight	3.3	x	3	3.2	x	3	3.3*	x	x	x
<b>Value of Fishery</b> (Trip Expenditures)										
Smallmouth Bass	86,240	x	x	x	x	80,190	2,330*	x	x	x

**White Crappie, Tims Ford Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	0.0	0.1	0.6	0.1	0.0	0.0	0.0	x	0.0	0.0
<b>Density</b> (trap netting (t) /electrofishing (e))*										
PSD (e)*	100	100	100	100	100	100	x	100	72	100
RSD (preferred) (e)*	65	73	86	100	100	100	67	33	27	67
CPUE (total) (t)*	*	*	*	*	*	*	*	0.07	0.04	0.1
CPUE $\geq$ Stock (t)*	*	*	*	*	*	*	*	0.06	0.01	0.0
CPUE $\geq$ MLL (10-inches) (t)*	*	*	*	*	*	*	*	0	0	0
<b>Growth</b> (spring electrofishing)										
Length Age-1	x	x	x	x	x	x	x	x	x	x
Length Age-3	x	x	x	x	x	x	x	x	x	x
<b>Condition</b> (spring electrofishing)										
Stock	x	x	x	x	x	108	77	x	101	x
Quality	93	93	92	x	x	x	x	95	99	93
Preferred	90	83	94	89	97	108	x	87	89	94
Memorable	87	83	88	90	x	x	77	x	90	90
<b>Mortality</b> (spring electrofishing)										
Total Mortality	x	x	x	x	x	x	x	x	x	x
<b>Stocking</b>										
#	0	0	0	0	0	0	0	0	0	0
#/Acre	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	26,556	x	12,197	7,867	x	10,200	3,752*	x	x	x
Angler Hours/Acre	2.5	x	1.2	0.7	x	1.0	0.4*	x	x	x
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.06	x	0.52	0.94	x	1.32	2.02	x	x	x
Harvest Rate (any crappie)	0.58	x	0.35	0.49	x	0.27	0.65	x	x	x
% Released (white crappie)	0	x	12.6	16.8	x	78.3	83.8	x	x	x
Mean Weight (white crappie)	0.9	x	1.2	*	x	0.7	1.0*	x	x	x
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	95,270	x	9,160	x	x	38,420	*	x	x	x

**Black Crappie, Tims Ford Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	0.0	0.1	0.4	0.5	0.0	0.0	0.2	0.1	0.1	0.2
<b>Density</b> (trap netting (t) /electrofishing (e))*										
PSD (e)*	87	81	100	83	89	x	x	90	83	100
RSD (preferred) (e)*	60	43	33	33	56	x	28	90	83	56
CPUE (total) (t)*	*	*	*	*	*	*	*	0.08	0.2	0.2
CPUE $\geq$ Stock (t)*	*	*	*	*	*	*	*	0.02	0.06	0.3
CPUE $\geq$ MLL (10-inches) (t)*	*	*	*	*	*	*	*	0	0	0
<b>Growth</b> (spring electrofishing)										
Length Age-1	7.2	x	x	x	x	x	x	x	x	x
Length Age-3	*	x	x	x	x	x	x	x	x	x
<b>Condition</b> (spring electrofishing)										
Stock	97	95	x	87	87	94	87	x	x	x
Quality	84	91	91	95	90	96	88	79	91	94
Preferred	x	81	87	78	80	x	82	92	80	87
Memorable	x	81	87	78	80	x	82	87	86	83
<b>Mortality</b> (spring electrofishing)										
Total Mortality	x	x	x	x	x	x	x	x	x	x
<b>Stocking</b>										
#	0	0	0	0	0	0	0	0	0	0
#/Acre	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	26,556	x	12,197	7,867	x	10,200	3,752*	x	x	x
Angler Hours/Acre	2.5	x	1.2	0.7	x	1.0	0.4*	x	x	x
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.06	x	0.52	0.94	x	1.32	2.02	x	x	x
Harvest Rate (any crappie)	0.58	x	0.35	0.49	x	0.27	0.65	x	x	x
% Released (black crappie)	6.8	x	10.7	9.6	x	66.7	71.1*	x	x	x
Mean Weight (black crappie)	0.9	x	0.9	0.9	x	0.85	0.7*	x	x	x
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	95,270	x	9,160	x	x	38,420	*	x	x	x

**Blacknose Crappie, Tims Ford Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	0.0	0.0	0.1	0.4	0.1	0.1	0.1	0.0	0.0	0.0
<b>Density</b> (trap netting (t) /electrofishing (e))*										
PSD (e)*	89	73	100	90	80	x	x	96	100	100
RSD (preferred) (e)*	67	36	50	50	40	19	28	64	63	63
CPUE (total) (t)*	*	*	*	*	*	*	*	0.07	0.15	0.1
CPUE $\geq$ Stock (t)*	*	*	*	*	*	*	*	0.06	0.11	0.0
CPUE $\geq$ MLL (10-inches) (t)*	*	*	*	*	*	*	*	0	0.01	0
<b>Growth</b> (spring electrofishing)										
Length Age-1	x	x	x	x	x	x	x	x	x	x
Length Age-3	x	x	x	x	x	x	x	x	x	x
<b>Condition</b> (spring electrofishing)										
Stock	102	89	x	101	90	92	87	76	x	x
Quality	98	102	99	89	93	x	87	89	85	96
Preferred	87	88	86	87	91	x	85	88	93	89
Memorable	86	75	x	81	93	x	82	92	83	83
<b>Mortality</b> (spring electrofishing)										
Total Mortality	x	x	x	x	x	x	x	x	x	x
<b>Stocking</b>										
#	61,817	119,595	106,312	82,531	206,097	98,378	80,691	128,980	106,004	156,411
#/Acre	5.8	11.3	10.0	7.8	19.4	9.3	7.6	12.2	10.0	14.8
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	26,556	x	12,197	7,867	x	10,200	3,752*	x	x	x
Angler Hours/Acre	2.5	x	1.2	0.7	x	1.0	0.4*	x	x	x
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.06	x	0.52	0.94	x	1.32	2.02	x	x	x
Harvest Rate (any crappie)	0.58	x	0.35	0.49	x	0.27	0.65	x	x	x
% Released (blacknose crappie)	15.5	x	23	8.4	x	59.9	74.3*	x	x	x
Mean Weight (blacknose crappie)	1	x	1.6	1.1	x	0.9	0.8*	x	x	x
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	95,270	x	9,160	x	x	38,420	*	x	x	x

**Walleye, Tims Ford Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (gill netting)										
Age-0 CPUE	0.2	0.1	0	x	x	0.1	0.1	0.2	1.7	0.44
<b>Density</b> (gill netting)										
PSD	75	60	88	55	73	x	x	87.5	59.2	65.7
RSD (preferred)	9	10	11	11	13	16	6	9	14	7
CPUE (total)	3.9	2.1	4.9	3.4	7.6	3	3.5	3.2	4.1	3.8
CPUE $\geq$ Stock	3.6	1.9	4.9	3	7.4	3	3.5	3.2	3.94	3.7
CPUE $\geq$ 16-inches	2.2	0.9	3.8	1.7	3.3	2.1	1	1.8	2.05	2.1
<b>Growth</b> (gill netting)										
Length Age-1	16.0	x	16.3	x	16.3	15.9	x	16.3	14.8	15.6
Length Age-3	x	x	20.7	x	20.0	19.9	x	x	19.1	19.1
<b>Condition</b> (gill netting)										
Stock	94.0	91.0	92.0	92.0	91.0	86.0	92.0	108.6	89.0	97.2
Quality	87.0	85.0	88.0	86.0	91.0	89.0	93.0	83.1	87.0	86.4
Preferred	88.0	89.0	84.0	87.0	84.0	86.0	92.0	89.2	79.8	80.0
Memorable	x	x	x	x	77.0	80.0	90.0	x	x	80.5
<b>Stocking</b>										
#	141,058	119,125	0	130,142	69,006	77,945	152,443	117,375	115,346	179,511
#/Acre	13.0	11.0	0.0	12.0	7.0	7.4	14.4	11.1	10.9	16.9
<b>Angling Pressure</b> (creel)										
Angler Hours	7,618	x	4,192	2,787	x	4,188	2,835*	x	x	x
Angler Hours/Acre	0.7	x	0.4	0.3	x	0.4	0.3	x	x	x
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.23	x	0.11	0.01	x	0.16	0.11	x	x	x
Harvest Rate (intended)	0.19	x	0.04	0.01	x	0.14	0.11	x	x	x
% Released	23.8	x	50.3	0	x	15.5	0*	x	x	x
Mean Weight	2.50	x	2.60	2.50	x	2.37	2.99*	x	x	x
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Walleye	59,370	x	18,910	x	x	18,010	5,980*	x	x	x

**Striped Bass, Tims Ford Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (gill netting)										
Age-0 CPUE	*	*	*	*	*	*	*	0.2	0.11	x
<b>Density</b> (gill netting)										
PSD	25	11	63	x	62	75	100	100	14	x
RSD (preferred)	0	0	0	x	x	*	100	x	x	x
CPUE (total)	0.2	1.1	0.3	1	1	0.4	0.1	0.3	0.5	x
CPUE $\geq$ Stock	0.2	1.1	0.5	1	1	0.4	0.1	0.1	0.39	x
CPUE $\geq$ 15-inches	0.2	0.6	x	0.5	x	0.1	0.1	0.1	0.11	x
<b>Growth</b> (gill netting)										
Length Age-2	18.7	19.4	21.6	x	20.0	22.0	x	x	20.3	x
Length Age-3	x	x	24.8	x	x	23.5	x	24.8	x	x
<b>Condition</b> (gill netting)										
Stock	74.0	90.0	93.0	95.0	92.0	74.0	x	x	82.9	x
Quality	66.0	64.0	84.0	x	83.0	76.0	101.0	95.1	x	x
Preferred	x	x	x	x	x	x	x	x	x	x
Memorable	*	*	*	*	*	*	*	x	x	x
<b>Stocking</b>										
#	75,862	58,559	87,602	69,577	49,486	57,056	29,952	30,184	43,713	29,470
#/Acre	7.2	5.5	8.3	6.6	4.7	5.4	2.8	2.8	4.1	2.8
<b>Angling Pressure</b> (creel)										
Angler Hours	11,715	x	5,003	5,962	x	11,142	3,036*	x	x	x
Angler Hours/Acre	1.1	x	0.5	0.6	x	1.1	0.3	x	x	x
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.15	x	0.25	0.10	x	0.11	0.25	x	x	x
Harvest Rate (intended)	0.11	x	0.06	0.06	x	0.09	0.11	x	x	x
% Released	71.7	x	86.3	47.4	x	40.7	86.0*	x	x	x
Mean Weight	7.68	x	6.70	7.13	x	5.32	4.30	x	x	x
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Striped Bass	0	x	x	x	x	42,120	x	x	x	x

**Hybrid (Cherokee) Bass, Tims Ford Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (gill netting)										
Age-0 CPUE	*	*	*	*	*	*	*	0.72	0.78	0.28
<b>Density</b> (gill netting)										
PSD	100	94	87	100	78	89	x	80.6	73.4	92.2
RSD (preferred)	77	14	87	100	75	72	98	69	47	59
CPUE (total)	3	4	10	4	2	6	2	3.5	2.62	2.9
CPUE $\geq$ Stock	3	4	10	4	2	6	2	3.44	2.5	2.8
CPUE $\geq$ 15-inches	3	3	8	4	2	3	2	2.4	1.17	1.6
<b>Growth</b> (gill netting)										
Length Age-2	20.8	x	19.4	x	19.7	x	x	19.8	16.2	20.4
Length Age-3	x	x	20.4	x	22.2	21.3	x	20.9	14.7	21.0
<b>Condition</b> (gill netting)										
Stock	x	89.0	91.0	x	88.0	89.0	98.0	85.9	98.6	92.4
Quality	88.0	83.0	x	x	97.0	97.0	92.0	85.9	90.1	89.2
Preferred	83.0	85.0	86.0	91.0	90.0	93.0	99.0	83.7	86.4	88.7
Memorable	90.0	85.0	87.0	86.0	87.0	90.0	98.0	87.7	79.0	92.3
<b>Stocking</b>										
#	35,040	58,738	28,214	0	51,918	34,723	24,282	16,800	25,150	29,282
#/Acre	3.0	6.0	3.0	0.0	5.0	3.3	2.3	1.6	2.4	2.8
<b>Angling Pressure</b> (creel)										
Angler Hours	180	x	665	789	x	3,218	1,868*	x	x	x
Angler Hours/Acre	0.0	x	0.1	0.1	x	0.3	0.2*	x	x	x
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.00	x	0.54	0.36	x	0.21	0.91	x	x	x
Harvest Rate (intended)	0.00	x	0.03	0.30	x	0.13	0.12	x	x	x
% Released	71.7	x	84.9	29.1	x	35.3	93.1*	x	x	x
Mean Weight	3.44	x	5.17	4.06	x	4.20	3.7*	x	x	x
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Cherokee Bass	x	x	x	x	x	33,430	1,330*	x	x	x

**2014 Habitat Enhancement - Tims Ford Reservoir**

Type of Work	Details	Quantity	
		New	Renovated
Planted	Cypress Trees	102 Trees, 3 Sites	
Rebrushed			
Checked and Refurbished			
Rebrushed			
Added			
Installed			

**2014 Water Quality Monitoring - Tims Ford Reservoir**

Parameter	Sampling Period	Water Quality
Temperature	July to August	normal
Dissolved Oxygen	July to August	normal



## Woods Reservoir

### Description

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**Area (acres):** 3,600      **Mean Depth (feet):**      **Shoreline (miles):** 65

**Counties:** Franklin and Coffee

**Full Pool Elevation (feet-msl):** 960      **Winter Pool Elevation (feet-msl):** 957

**Dam Completion:** 1952

### Summary:

Over the past five years, yearly creel surveys have not been conducted on Woods Reservoir. From 2006 to 2009, three yearly creel surveys (two concurrent) were conducted. Creel data collected during this four year period indicated an increase in angler hours of approximately 39.2 %. The increase in angler hours from 2006 to 2009 was the result of consecutive crappie year classes recruiting successfully into the harvestable length range and a two-fold increase in effort for largemouth bass.

Woods Reservoir has two primary fisheries: a crappie fishery and a black bass fishery. The crappie fishery is comprised of a black crappie fishery and a white crappie fishery, while the black bass fishery is comprised of a largemouth bass fishery and a smallmouth bass fishery. As a result of marginal habitat, the smallmouth bass fishery is extremely limited. Based on the result of the last creel survey conducted in 2009, largemouth bass accounted for approximately 66.8 % of directed angler effort. The density estimate of stock length largemouth bass collected during 2014 electrofishing samples rated as “average.” Based on the substock abundance estimate of 18 fish / hour, largemouth bass recruitment was rated as “moderate.” Compared to the substock abundance estimates from the previous ten years, the 2014 value was the highest documented, and exceeded the previous high value (2006) by 22.2 %. A PSD of 68 indicated the largemouth population to be in balance, mainly as a result of an increase in largemouth bass  $\geq 15.0$  inches. The increase in abundance of largemouth bass  $\geq 15.0$  inches over the past two years has been the result of anglers self-imposing a minimum length limit, and not an enacted law. Length frequency data and associated age data indicated the continued existence of a quality largemouth bass population. Additional age data, which will be collected in 2016, will be utilized to confirm that acceptable growth and age structure exists in the largemouth bass population.

Rocky substrate, which is the preferred habitat of smallmouth bass, is limited to a few “points” prior to entering coves in the lower end of the lake. As a result of limited habitat, smallmouth bass persist at a minimal level of abundance. As a result, directed angler effort for smallmouth bass is extremely low compared to largemouth bass. Supplemental stockings did occur in the 1980’s and 1990’s, but post stocking evaluation indicated that the stockings did not enhance the smallmouth bass fishery of Woods Reservoir.

The black crappie and white crappie fisheries combined (hereafter crappie fishery) comprised the second most popular fishery on Woods Reservoir. Directed effort for crappie was approximately 33.2 % of the total angler directed effort. Two very strong consecutive year classes (2010-2011) followed by two consecutive moderate year classes (2012-2013) resulted in a crappie fishery with excellent abundance, size structure, and age structure. Over the past ten years, only two weak year classes were detected (2006 and 2009) in the Woods Reservoir crappie fishery. In both years, juvenile recruitment rated as low (2006 - 0.8 fish / net night and 2009 - 0.2 fish / net night). The effect of variable recruitment has been

**Summary:**

fairly uniform, regardless of species. Angler effort, as calculated from the most recent creel data (2006, 2007, and 2009) indicated that over the aforementioned four year period, angler hours increased only marginally at 12.9 %. Based on the current status of the crappie fishery, anglers have been satisfied with the 10.0 inch minimum length limit, have been experiencing higher catch rates, and have been harvesting crappie at a higher rate than normal above the minimum length limit.

Habitat enhancements by the reservoir crew have been extensive over the previous ten years on Woods Reservoir. Bald cypress trees were planted at three different areas to aid in shoreline stabilization and to provide nursery habitat as these trees mature. Pine trees are regularly added to both marked shallow and marked deep water sites to provide attractors for concentrating adult fish. Stake beds, using wooden stakes, have been installed to provide fishing habitat for crappie anglers. Artificial fish attractors have also periodically been installed to benefit bass and sunfish anglers. As a result of limited winter drawdown, spawning benches have not been placed into Woods Reservoir. The most recent habitat work, which was completed during the winter of 2014, was the creation of four new deep water fish attractor areas. A total of twelve weighted pine trees were placed at each of the four new fish attractor locations. Additional habitat work was not conducted in 2014.

**Lakewide Angling Summary, Woods Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	x	33,948	50,715	x	55,861	x	x	x	x	x
Angler Hours Per Acre	x	9.0	14.0	x	15.0	x	x	x	x	x
Angler Trips	x	7,400	10,992	x	11,914	x	x	x	x	x
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	x	x	x	x	287,490	x	x	x	x	x

**Black Bass, Woods Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
All Black Bass (hrs)	x	14,309	24,130	x	33,407	x	x	x	x	x
(hrs/acre)	x	3.9	6.6	x	9.1	x	x	x	x	x
Any Black Bass (hrs)	x	14,125	24,004	x	32,425	x	x	x	x	x
(hrs/acre)	x	3.9	6.6	x	8.9	x	x	x	x	x
Largemouth Bass (hrs)	x	184	126	x	982	x	x	x	x	x
(hrs/acre)	x	0.1	0.0	x	0.3	x	x	x	x	x
Smallmouth Bass (hrs)	x	x	x	x	x	x	x	x	x	x
(hrs/acre)	x	x	x	x	x	x	x	x	x	x
Spotted Bass (hrs)	x	x	x	x	x	x	x	x	x	x
(hrs/acre)	x	x	x	x	x	x	x	x	x	x
<b>Tournaments (all black bass)</b>										
# Tournaments (BITE)	x	x	x	x	x	x	x	x	x	x
Pounds/Angler Day (BITE)	x	x	x	x	x	x	x	x	x	x
Bass/Angler Day (BITE)	x	x	x	x	x	x	x	x	x	x
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	x	x	x	x	207,980	x	x	x	x	x
Any Black Bass	x	x	x	x	204,760	x	x	x	x	x
Largemouth Bass	x	x	x	x	3,220	x	x	x	x	x
Smallmouth Bass	x	x	x	x	x	x	x	x	x	x
Spotted Bass	x	x	x	x	x	x	x	x	x	x

**Largemouth Bass, Woods Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	10	14	7	9	8	0	10	7	10	18
<b>Density</b> (electrofishing)										
PSD	51	73	60	89	73	29	25	56	54	68
RSD (preferred)	27	28	16	67	21	11	16	*	24	29
CPUE (total)	44	52	62	60	60	67	42	55	60	79
CPUE $\geq$ Stock	34	38	56	51	52	31	31	44	50	61
CPUE $\geq$ (15-inches)	9	11	9	11	11	5	5	7	12	17
<b>Growth</b> (electrofishing)										
Length Age-1	x	x	x	x	x	x	x	x	x	x
Length Age-3	x	x	x	x	x	x	x	x	x	x
<b>Condition</b> (spring electrofishing)										
Stock	85	90	87	87	83	83	83	84	81	81
Quality	89	89	87	83	81	85	81	84	83	84
Preferred	98	97	89	85	90	82	84	89	95	95
Memorable	100	109	75	103	86	89	79	78	95	99
<b>Mortality</b> (electrofishing)										
Total Mortality	x	x	x	x	x	x	x	x	x	x
<b>Stocking</b>										
#	0	0	0	0	0	0	0	0	0	0
#/Acre	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	x	0.77	0.2	x	0.64	x	x	x	x	x
Harvest Rate (intended)	x	0	0	x	0.05	x	x	x	x	x
% Released	x	82.7	85.1	x	83.5	x	x	x	x	x
Mean Weight	x	1.4	1.5	x	1	x	x	x	x	x
<b>Value of Fishery</b> (Trip Expenditures)										
Largemouth Bass	x	x	x	x	3,220	x	x	x	x	x

**Smallmouth Bass, Woods Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	*	*	*	*	*	*	*	x	0	1
<b>Density</b> (electrofishing)										
PSD	*	*	*	*	*	*	*	17	29	38
RSD (preferred)	*	*	*	*	*	*	*	x	29	13
CPUE (total)	*	*	*	*	*	*	*	4	3	7
CPUE $\geq$ Stock	*	*	*	*	*	*	*	2	2	5
CPUE $\geq$ MLL (18-inches)	*	*	*	*	*	*	*	0	0	0
<b>Growth</b> (electrofishing)										
Length Age-1	*	*	*	*	*	*	*	x	x	x
Length Age-3	*	*	*	*	*	*	*	x	x	x
<b>Condition</b> (spring electrofishing)										
Stock	*	*	*	*	*	*	*	x	78	84
Quality	*	*	*	*	*	*	*	80	x	78
Preferred	*	*	*	*	*	*	*	x	87	68
Memorable	*	*	*	*	*	*	*	x	x	81
<b>Mortality</b> (electrofishing)										
Total Mortality	*	*	*	*	*	*	*	x	x	x
<b>Stocking</b>										
#	0	0	0	0	0	0	0	0	0	0
#/Acre	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	x	x	x	x	x	x	x	x	x	x
Harvest Rate (intended)	x	x	x	x	x	x	x	x	x	x
% Released	x	*	*	x	*	x	x	x	x	x
Mean Weight	x	*	*	x	*	x	x	x	x	x
<b>Value of Fishery</b> (Trip Expenditures)										
Smallmouth Bass	x	x	x	x	x	x	x	x	x	x

**White Crappie, Woods Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	0.8	0.3	0.5	2.3	0.2	3.0	6.0	2.3	1.3	7.0
<b>Density</b> (trap netting (t) /electrofishing (e))*										
PSD (e)*	100	98	100	100	100	*	100	75	100	100
RSD (preferred) (e)*	62	90	47	100	76	*	100	*	48	91
CPUE (total) (t)*	*	*	*	*	*	*	*	2.54	1.42	7.3
CPUE $\geq$ Stock (t)*	*	*	*	*	*	*	*	0.27	0.17	0.0
CPUE $\geq$ MLL (10-inches) (t)*	*	*	*	*	*	*	*	0.19	0.04	0.04
<b>Growth</b> (spring electrofishing)										
Length Age-1	x	x	x	x	x	x	x	x	x	x
Length Age-3	x	x	x	x	x	x	x	x	10.47	x
<b>Condition</b> (spring electrofishing)										
Stock	x	97	x	x	x	*	88	91	x	x
Quality	97	92	101	95	99	*	88	84	96	96
Preferred	93	94	92	97	92	*	x	89	94	93
Memorable	90	90	78	92	86	*	x	x	x	92
<b>Mortality</b> (spring electrofishing)										
Total Mortality	x	x	x	x	x	x	x	x	72	x
<b>Stocking</b>										
#	0	44,482	0	0	27,019	0	0	0	0	0
#/Acre	0.0	12.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	x	14,451	18,926	x	16,605	x	x	x	x	x
Angler Hours/Acre	x	4.0	5.2	x	4.5	x	x	x	x	x
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	x	0.79	0.75	x	0.6	x	x	x	x	x
Harvest Rate (any crappie)	x	0.51	0.39	x	0.34	x	x	x	x	x
% Released (w hite crappie)	x	7.9	18.3	x	58.3	x	x	x	x	x
Mean Weight (w hite crappie)	x	0.8	0.8	x	0.9	x	x	x	x	x
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	x	x	x	x	67,580	x	x	x	x	x

**Black Crappie, Woods Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	6.3	0.5	1.1	4.0	0.0	4.0	1.4	0.2	0.7	4.4
<b>Density</b> (trap netting (t) /electrofishing (e))*										
PSD (e)*	97	100	100	100	100	*	46	31	100	100
RSD (preferred) (e)*	22	50	29	100	64	*	x	13	*	50
CPUE (total) (t)*	*	*	*	*	*	*	*	0.29	0.81	4.4
CPUE $\geq$ Stock (t)*	*	*	*	*	*	*	*	0.06	0.1	0.1
CPUE $\geq$ MLL (10-inches) (t)*	*	*	*	*	*	*	*	0	0	0.04
<b>Growth</b> (spring electrofishing)										
Length Age-1	x	x	x	x	x	x	x	x	x	x
Length Age-3	x	x	x	x	x	x	x	x	8.62	x
<b>Condition</b> (spring electrofishing)										
Stock	82	x	x	x	x	*	86	86	x	x
Quality	88	97	99	94	96	*	x	79	89	87
Preferred	86	91	91	90	86	*	x	77	x	86
Memorable	x	x	85	62	86	*	x	x	x	x
<b>Mortality</b> (spring electrofishing)										
Total Mortality	x	x	x	x	x	x	x	x	69	x
<b>Stocking</b>										
#	0	0	0	0	0	0	0	0	0	0
#/Acre	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	x	14,451	18,926	x	16,605	x	x	x	x	x
Angler Hours/Acre	x	4.0	5.2	x	4.5	x	x	x	x	x
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	x	0.79	0.75	x	0.6	x	x	x	x	x
Harvest Rate (any crappie)	x	0.51	0.39	x	0.34	x	x	x	x	x
% Released (black crappie)	x	4.4	4.4	x	51.4	x	x	x	x	x
Mean Weight (black crappie)	x	0.9	0.8	x	0.8	x	x	x	x	x
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	x	x	x	x	67,580	x	x	x	x	x



**Blacknose Crappie, Woods Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	0.8	0.0	0.1	0.2	0.0	0.3	0.4	x	0.1	0.4
<b>Density</b> (trap netting (t) /electrofishing (e))*										
PSD (e)*	100	100	100	100	100	*	x	0	100	100
RSD (preferred) (e)*	46	40	0	93	33	*	25	*	*	54
CPUE (total) (t)*	*	*	*	*	*	*	*	x	0.06	0.4
CPUE $\geq$ Stock (t)*	*	*	*	*	*	*	*	x	0.06	0.0
CPUE $\geq$ MLL (10-inches) (t)*	*	*	*	*	*	*	*	x	0	0.04
<b>Growth</b> (spring electrofishing)										
Length Age-1	x	x	x	x	x	x	x	x	x	x
Length Age-3	x	x	x	x	x	x	x	x	x	x
<b>Condition</b> (spring electrofishing)										
Stock	x	x	x	x	x	*	98	88	x	x
Quality	90	101	98	98	x	*	93	x	83	90
Preferred	x	x	x	x	90	*	78	x	x	85
Memorable	x	x	x	x	16	*	x	x	x	x
<b>Mortality</b> (spring electrofishing)										
Total Mortality	x	x	x	x	x	x	x	x	x	x
<b>Stocking</b>										
#	0	0	0	0	126,377	0	0	0	0	0
#/Acre	0.0	0.0	0.0	0.0	35.0	0.0	0.0	0.0	0.0	0.0
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	x	14,451	18,926	x	16,605	x	x	x	x	x
Angler Hours/Acre	x	4.0	5.2	x	4.5	x	x	x	x	x
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	x	0.79	0.75	x	0.6	x	x	x	x	x
Harvest Rate (any crappie)	x	0.51	0.39	x	0.34	x	x	x	x	x
% Released (blacknose crappie)	x	5.7	20.4	x	43.5	x	x	x	x	x
Mean Weight (blacknose crappie)	x	0.9	0.8	x	0.9	x	x	x	x	x
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	x	x	x	x	67,580	x	x	x	x	x

**2014 Habitat Enhancement - Woods Reservoir**

				Quantity	
Type of Work	Details		New		Renovated
Planted					
Rebrushed	Cedar Trees to Established Bouy Stes		48 trees , 4 Sites		
Checked and Refurbished					
Rebrushed					
Added					
Installed					

**2014 Water Quality Monitoring - Woods Reservoir**

Parameter	Sampling Period	Water Quality
Temperature	July to August	normal
Dissolved Oxyged	July to August	normal

## REGION 3

### Center Hill Reservoir (2014 Annual Report)

#### Description

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**Area (acres):** 18,220      **Mean Depth (feet):** 73      **Shoreline (miles):** 415

**Counties:** Dekalb, Putnam, Warren, White

**Full Pool Elevation (feet-msl):** 648      **Winter Pool Elevation (feet-msl):**

**Dam Completion:** 1948

#### Summary:

No spring electrofishing surveys were conducted for black bass on Center Hill in 2014. These surveys are typically conducted here on alternate years, thus an electrofishing survey is planned for the spring of 2015. Additionally no creel surveys were conducted on Center Hill in 2014.

The largemouth bass fishery is stable and should provide good fishing opportunities for 2015. According to the roving creel surveys, angling pressure for black bass has remained consistent for the last ten years with an average effort of 7.74 hours/acre. Electrofishing surveys were conducted in 2013 and are scheduled to be conducted again in 2015 per the bi-annual work schedule. In 2009, age one largemouth bass CPUE via electrofishing was at a higher rate (3.4/hour) than experienced over the previous ten years. In contrast, CPUE for this same substock size was 1.8 in 2013. The CPUE of 15.0 for largemouth bass/hour  $\geq$  the MLL of 15" was above the 10 year mean of 10.2 fish/hour. Condition factors (Wr) for all size ranges of largemouth bass looked satisfactory as well.

Smallmouth bass fishing should be stable for the 2015 fishing season. CPUE of smallmouth bass  $\geq$  MLL of 18" is low or non-existent according to electrofishing surveys. In fact the trend has steadily declined over the past decade and beyond. More conducive sampling strategies (i.e. water temp., time of year, time of day, etc.) may help to collect more of these fish. Hopefully, 2015 will prove to be a good year for recruitment within the smallmouth bass population.

Because Center Hill Reservoir has consistently harbored a good population of spotted bass, anglers in pursuit of these fish will find ample opportunity here for good angling success. For many years, Center Hill Reservoir was the host of the state record spotted bass of 5lb 8oz. CPUE for 2013 age 1 (substock) spotted collected via electrofishing were the lowest recorded in the past ten years. However, mid-summer seining surveys in 2013 were the highest recorded (21.4 spb/seine haul) in the past ten years hopefully signaling a favorable spawning success.

White crappie make up a small percentage of the overall crappie population in Center Hill Reservoir. Black crappie (including "blacknose" crappie) represent the majority of the crappie in Center Hill Reservoir. Anglers pursuing crappie should expect to find good numbers of available crappie here. Low reproductive success occurring on an annual basis led to the initiation of a "blacknose" crappie stocking program here in 1990. Currently "blacknose" black crappie are stocked into Center Hill on an annual basis. Over the past 10 years, there has been an average of 8.5 "blacknose" crappie have been stocked per acre. Angler catch rates in 2013 were 0.98 fish/hour which is below the current ten year average of 1.18 fish/hour.

Angler catch rates for bluegill are near the current ten year average. Good bluegill fishing should be anticipated for sunfish anglers on Center Hill Reservoir. CPUE for the 2014 mid-summer seining samples were high at 5.40 bluegill/seine haul when compared to a ten year average of 2.89 fish/seine haul.

Catch rates for walleye for 2013 were near the ten year average according to roving creel surveys. Walleye continue to be stocked into Center Hill Reservoir on an annual basis. Based on these facts, walleye anglers should anticipate stable, good fishing for walleye at Center Hill. Expenditures by anglers in pursuit of walleye for 2013 were the lowest in the last ten years at \$116,000. The ten year average for expenditures is \$246,000.

Catch rates for catfish are stable based on 10 year averages. According to creel surveys \$41,000 was spent on trip expenditures in pursuit of catfish (any species) in 2013. This was the highest recorded in the past ten years. Center Hill Reservoir is not known as a top destination for catfish angling when compared to other reservoirs in Region 3.

**Lakewide Angling Summary**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	320,532	296,236	277,219	322,409	317,969	279,400	-	264,973	205,427	-
Angler Hours Per Acre	17.6	19.8	15.2	17.6	17.4	15.3	-	14.6	11.4	-
Angler Trips	57,781	19,198	52,084	58,367	58,930	48,768	-	45,881	37,436	-
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	1,051,430	999,040	977,450	1,446,270	995,560	916,980	-	1,051,260	780,460	-

**Black bass, Center Hill Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
All Black Bass (hrs)	138,253	140,142	123,923	177,713	159,565	151,328	-	132,966	104,049	-
(hrs/acre)	7.59	7.69	6.80	9.75	8.76	8.31	-	7.30	5.71	-
Any Black Bass (hrs)	127,473	126,474	115,056	160,682	149,123	131,316	-	121,607	88,620	-
(hrs/acre)	7.00	6.94	6.31	8.82	8.18	7.21	-	6.67	4.86	-
Largemouth Bass (hrs)	-	-	-	-	-	418	-	271.00	-	-
(hrs/acre)	-	-	-	-	-	0.02	-	0.01	-	-
Smallmouth Bass (hrs)	1,537	3,149	3,392	5,124	3,410	9,298	-	7,475	7,923	-
(hrs/acre)	0.08	0.17	0.19	0.28	0.19	0.51	-	0.41	0.44	-
Spotted Bass (hrs)	9,243	10,519	5,475	11,907	7,032	10,296	-	3,613	7,506	-
(hrs/acre)	0.51	0.58	0.30	0.65	0.39	0.57	-	0.20	0.41	-
<b>Tournaments (all black bass)</b>										
# Tournaments (BITE)	5	-	1	-	-	-	-	-	-	-
Pounds/Angler Day (BITE)	3.8	-	2.7	-	-	-	-	-	-	-
Bass/Angler Day (BITE)	1.9	-	1.0	-	-	-	-	-	-	-
Tournament Angler Hrs/Acre (creel)	-	-	-	-	-	-	-	-	-	-
Tournament Catch Rate (creel)	0.13	0.22	0.24	0.49	0.29	0.47	-	0.45	0.33	-
Non-Tournament Catch Rate (creel)	0.39	0.52	0.61	0.56	0.69	0.56	-	0.52	0.52	-
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	\$651,010	\$605,700	\$540,650	\$1,697,830	\$621,280	\$1,046,670	-	\$653,830	\$441,440	-
Any Black Bass	\$615,320	\$555,630	\$507,070	\$1,553,590	\$582,760	\$922,580	-	\$596,320	\$369,440	-
Largemouth Bass	-	-	-	-	-	\$3,880	-	\$2,190	-	-
Smallmouth Bass	\$4,730	\$13,750	\$8,530	\$54,990	\$16,990	\$59,210	-	\$46,880	\$39,010	-
Spotted Bass	\$30,960	\$36,320	\$25,050	\$89,250	\$21,530	\$61,000	-	\$8,440	\$32,990	-

**Largemouth Bass, Center Hill Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	0.20	-	0.00	-	3.40	-	0.20	-	1.80	-
CPUE (mid-summer seine)	0.00	1.10	0.40	0.60	0.40	0.60	1.50	0.40	0.50	0.30
<b>Density (spring electrofishing)</b>										
PSD	88	-	98	-	92	-	90	-	90	-
RSD (preferred)	78.0	-	85.0	-	74.0	-	43.0	-	68	-
CPUE (total)	21.4	-	12.2	-	15.6	-	18.0	-	20.0	-
CPUE $\geq$ Stock	21.2	-	12.2	-	12.2	-	17.8	-	18.2	-
CPUE $\geq$ MLL (15-inches)	8.8	-	10.4	-	9.0	-	7.6	-	15.0	-
<b>Growth (spring electrofishing)</b>										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	381.0	-	-	-	-	-	-	-	-	-
<b>Condition (spring electrofishing)</b>										
Stock	133.5	-	100.5	-	93.1	-	125.1	-	102.9	-
Quality	103.7	-	96.1	-	99.2	-	94.9	-	102.6	-
Preferred	99.8	-	95.5	-	95.6	-	95.1	-	96.7	-
Memorable	90.4	-	-	-	97.7	-	89.5	-	91.3	-
<b>Mortality (spring electrofishing)</b>										
Total Mortality	30.0%	-	-	-	-	-	-	-	-	-
<b>Fishing Success (creel)</b>										
Catch Rate, num./hr (intended)	N/A	N/A	N/A	N/A	N/A	0.00	-	0.53	-	-
Catch Rate, num./hr (any black bass)	0.35	0.49	0.58	0.56	0.56	0.54	-	0.56	0.52	-
Harvest Rate, num./hr (any black bass)	0.09	0.18	0.22	0.19	0.19	0.16	-	0.16	0.17	-
% Released	76.2%	71.1%	77.4%	73.9%	86.2%	81.3%	-	66.6%	82.6%	-
Mean Weight	2.90	3.08	2.80	2.99	3.02	3.52	-	2.83	2.65	-

**Smallmouth Bass, Center Hill Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	1.00	-	0.00	-	1.60	-	-	-	-	-
CPUE (mid-summer seine)	0.00	0.30	0.40	1.30	0.30	0.60	0.10	0.00	0.10	0.30
<b>Density</b> (spring electrofishing)										
PSD	61	-	61	-	29	-	-	-	-	-
RSD (preferred)	53.0	-	30.0	-	26.0	-	-	-	-	-
CPUE (preferred)	-	-	-	-	1.8	-	-	-	-	-
CPUE (total)	2.0	-	11.2	-	8.6	-	3.4	-	0.6	-
CPUE $\geq$ Stock	1.0	-	11.2	-	7.0	-	-	-	-	-
CPUE $\geq$ Preferred	-	-	-	-	1.8	-	-	-	-	-
CPUE $\geq$ MLL (15-inches)	1.6	-	2.0	-	-	-	-	-	-	-
<b>Growth</b> (spring electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	334.0	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	98.4	-	-	-	96.2	-	-	-	-	-
Quality	91.4	-	-	-	91.3	-	-	-	-	-
Preferred	95.9	-	-	-	90.5	-	-	-	-	-
Memorable	91.4	-	-	-	80.8	-	-	-	-	-
<b>Mortality</b> (spring electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (intended)	0.00	0.04	0.09	0.10	0.29	0.27	-	0.30	0.40	-
Catch Rate, num./hr (any black bass)	0.35	0.49	0.58	0.56	0.56	0.54	-	0.56	0.52	-
Harvest Rate, num./hr (any black bass)	0.09	0.18	0.22	0.19	0.19	0.00	-	0.04	0.17	-
% Released	76.2%	71.1%	77.4%	73.9%	83.6%	94.1%	-	92.4%	87.9%	-
Mean Weight	2.90	3.08	2.80	2.99	2.37	3.11	-	3.48	3.22	-



**Smallmouth Bass (Targeted), Center Hill Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	-	1.00	-	-	-	-	-	0.00	-	-
<b>Density</b> (electrofishing)										
PSD	-	57	-	-	-	-	-	87	-	-
RSD (preferred)	-	42.0	-	-	-	-	-	58.7	-	-
CPUE (preferred)	-	-	-	-	-	-	-	1.8	-	-
CPUE (total)	-	11.1	-	-	-	-	-	22.3	-	-
CPUE $\geq$ Stock	-	10.0	-	-	-	-	-	22.3	-	-
CPUE $\geq$ Preferred	-	2.5	-	-	-	-	-	13.1	-	-
CPUE $\geq$ MLL (18-inches)	-	0.1	-	-	-	-	-	2.8	-	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	84.1	-	-	-	-	-	87.2	-	-
Quality	-	97.1	-	-	-	-	-	85.7	-	-
Preferred	-	89.9	-	-	-	-	-	88.0	-	-
Memorable	-	81.0	-	-	-	-	-	79.8	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-

**Spotted Bass, Center Hill Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	10.0	-	2.2	-	7.6	-	2.8	-	0.6	-
CPUE (mid-summer seine)	2.2	12.0	7.8	4.1	1.1	6.3	6.6	0.4	21.4	7.6
<b>Density (spring electrofishing)</b>										
PSD	60.0	-	63.0	-	41.0	-	63.0	-	56.0	-
RSD (preferred)	10.0	-	18.0	-	12.0	-	24.0	-	16.0	-
CPUE (total)	63.2	-	37.0	-	59.0	-	35.0	-	11.0	-
CPUE $\geq$ Stock	61.0	-	29.2	-	51.4	-	32.2	-	10.6	-
<b>Growth (spring electrofishing)</b>										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	381.0	-	-	-	-	-	-	-	-	-
<b>Condition (spring electrofishing)</b>										
Stock	114.1	-	109.5	-	107.6	-	116.8	-	114.5	-
Quality	111.3	-	102.7	-	105.0	-	105.1	-	111.5	-
Preferred	108.9	-	101.7	-	103.7	-	103.4	-	98.4	-
<b>Mortality (spring electrofishing)</b>										
Total Mortality	62.0%	-	-	-	-	-	-	-	-	-
<b>Fishing Success (creel)</b>										
Catch Rate, num./hr (intended)	0.70	0.75	0.53	0.87	0.95	0.76	-	0.48	0.70	-
Catch Rate, num./hr (any black bass)	0.35	0.49	0.58	0.56	0.56	0.54	-	0.56	0.52	-
Harvest Rate, num./hr (any black bass)	0.09	0.18	0.22	0.19	0.19	0.45	-	0.29	0.17	-
% Released	76.2%	71.1%	77.4%	73.9%	60.0%	62.2%	-	56.4%	54.8%	-
Mean Weight	2.90	3.08	2.80	2.99	1.52	1.49	-	1.23	1.63	-

**White Crappie, Center Hill Reservoir**

	2005	2006*	2007	2008	2009	2010	2011	2012	2013*	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	-	-	-	-	-	-	-	-	-	-
<b>Density</b> (electrofishing)										
PSD	-	-	-	-	-	-	-	-	-	-
RSD (preferred)	-	98.0	-	-	-	-	-	-	-	-
CPUE (total)	-	8.1	-	-	-	-	-	-	1.7	-
CPUE $\geq$ Stock	-	8.1	-	-	-	-	-	-	-	-
CPUE $\geq$ MLL (10-inches)	-	7.8	-	-	-	-	-	-	-	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	290.0	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	113.7	-	-	-	-	-	-	-	-
Preferred	-	105.5	-	-	-	-	-	-	-	-
Memorable	-	102.4	-	-	-	-	-	-	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	48,801	38,749	40,376	40,187	32,473	28,806	-	21,501	13,060	-
Angler Hours/Acre	2.68	2.13	2.22	2.21	1.78	1.58	-	1.18	0.72	-
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	0.75	1.38	1.67	0.96	1.50	1.49	-	0.83	0.98	-
Harvest Rate (any crappie)	0.32	0.61	0.59	0.40	0.41	0.63	-	0.29	0.40	-
% Released (w hite crappie)	52.7%	39.8%	48.3%	38.6%	75.9%	0.0%	-	0.0%	0.0%	-
Mean Weight (w hite crappie)	0.91	1.05	0.91	0.83	0.99	0.80	-	1.53	1.00	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	\$190,010	\$146,950	\$200,570	\$172,330	\$123,990	\$97,960	-	\$53,820	\$48,920	-

\*Targeted Sample

**Black Crappie, Center Hill Reservoir**

	2005	2006*	2007	2008	2009	2010	2011	2012	2013*	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	-	0.00	-	-	-	-	-	-	-	-
<b>Density</b> (electrofishing)										
PSD	-	-	-	-	-	-	-	-	92	-
RSD (preferred)	-	-	-	-	-	-	-	-	56	-
CPUE (total)	-	2.3	-	-	-	-	0.2	-	7.4	-
CPUE $\geq$ Stock	-	2.3	-	-	-	-	-	-	7.4	-
CPUE $\geq$ MLL (10-inches)	-	1.5	-	-	-	-	-	-	3.5	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	-	-	-	-	-	-	-	109.5	-
Quality	-	-	-	-	-	-	-	-	115.4	-
Preferred	-	-	-	-	-	-	-	-	107.0	-
Memorable	-	-	-	-	-	-	-	-	109.0	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	48,801	38,749	40,376	40,187	32,473	28,806	-	21,501	13,060	-
Angler Hours/Acre	2.68	2.13	2.22	2.21	1.78	1.58	-	1.18	0.72	-
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	0.75	1.38	1.67	0.96	1.50	1.49	-	0.83	0.98	-
Harvest Rate (any crappie)	0.32	0.61	0.59	0.40	0.41	0.63	-	0.29	0.40	-
% Released (black crappie)	46.0%	49.7%	40.8%	0.0%	75.2%	38.5%	-	41.2%	60.5%	-
Mean Weight (black crappie)	1.00	0.99	1.19	1.55	1.27	1.29	-	1.10	0.92	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	\$190,010	\$146,950	\$200,570	\$172,330	\$123,990	\$97,960	-	\$53,820	\$48,920	-

\*Targeted Sample

**Blacknose Crappie, Center Hill Reservoir**

	2005	2006*	2007	2008	2009	2010	2011	2012	2013*	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	-	0.00	-	-	-	-	-	-	0.00	-
<b>Density</b> (electrofishing)										
PSD	-	98.0	-	-	-	-	-	-	97.0	-
RSD (preferred)	-	66.0	-	-	-	-	-	-	44.0	-
CPUE (total)	-	12.9	-	-	-	-	3.2	-	26.2	-
CPUE $\geq$ Stock	-	12.9	-	-	-	-	-	-	26.2	-
CPUE $\geq$ MLL (10-inches)	-	8.5	-	-	-	-	-	-	9.7	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	301.0	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	129.1	-	-	-	-	-	-	99.5	-
Quality	-	118.3	-	-	-	-	-	-	116.2	-
Preferred	-	115.7	-	-	-	-	-	-	119.1	-
Memorable	-	107.8	-	-	-	-	-	-	103.6	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	115,140	231,402	212,344	81,894	254,538	120,574	174,255	129,010	118,954	114,960
#/Acre	6.3	12.7	11.7	4.5	14.0	6.6	9.6	7.1	6.5	6.3
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	48,801	38,749	40,376	40,187	32,473	28,806	-	21,501	13,060	-
Angler Hours/Acre	2.68	2.13	2.22	2.21	1.78	1.58	-	1.18	0.72	-
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	0.75	1.38	1.67	0.96	1.50	1.49	-	0.83	0.98	-
Harvest Rate (any crappie)	0.32	0.61	0.59	0.40	0.41	0.63	-	0.29	0.40	-
% Released (blacknose crappie)	54.3%	63.6%	68.9%	64.8%	74.9%	57.7%	-	72.4%	58.9%	-
Mean Weight (blacknose crappie)	1.16	1.22	1.73	1.21	1.26	1.18	-	1.25	1.00	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	\$190,010	\$146,950	\$200,570	\$172,330	\$123,990	\$97,960	-	\$53,820	\$48,920	-

\*Targeted Sample

**Sunfish, Center Hill Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Bluegill CPUE (mid-summer seine)	3.60	1.00	1.10	1.30	3.30	6.90	3.90	1.50	0.90	5.40
Redear CPUE (mid-summer seine)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
<b>Angling Pressure (creel)</b>										
Angler Hours (all sunfish)	14,998	17,877	14,652	7,019	14,514	21,622	-	17,499	27,146	-
Angler Hours/Acre	0.82	0.98	0.80	0.39	0.80	1.19	-	0.96	1.49	-
<b>Fishing Success (creel)</b>										
Catch Rate (any sunfish)	3.73	3.63	6.97	1.95	3.75	3.60	-	2.69	1.70	-
Harvest Rate (any sunfish)	2.17	2.18	4.56	1.29	2.05	2.42	-	1.80	1.14	-
% Released (bluegill)	43.5%	48.2%	38.7%	40.9%	46.8%	37.4%	-	33.9%	40.5%	-
Mean Weight (bluegill)	0.33	0.36	0.26	0.30	0.40	0.41	-	0.40	0.43	-
<b>Value of Fishery (Trip Expenditures - creel)</b>										
All Sunfish	\$27,180	\$46,100	\$40,630	\$16,890	\$65,570	\$84,750	-	\$61,190	\$112,420	-

**Catfish, Center Hill Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure (creel)</b>										
Angler Hours (all catfish)	3,512	6,305	9,376	6,342	5,550	7,882	-	13,801	13,239	-
Angler Hours/Acre	0.19	0.35	0.51	0.35	0.30	0.43	-	0.76	0.73	-
<b>Fishing Success (creel)</b>										
Catch Rate (any catfish)	0.11	0.42	0.37	0.22	0.21	0.32	-	0.13	0.32	-
Harvest Rate (any catfish)	0.11	0.42	0.37	0.22	0.21	0.32	-	0.13	0.29	-
% Released (channel)	0.0%	15.4%	6.7%	24.6%	11.0%	8.1%	-	12.4%	25.5%	-
Mean Weight (channel)	6.88	3.28	3.14	2.78	3.64	4.12	-	3.62	3.14	-
<b>Value of Fishery (Trip Expenditures - creel)</b>										
All Catfish	\$6,580	\$16,580	\$27,410	\$21,010	\$25,410	\$35,580	-	\$26,950	\$40,700	-

**Walleye, Center Hill Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (gill netting)										
Substock CPUE (gill netting)	-	0.0	-	-	-	-	0.0	-	-	-
CPUE (mid-summer seine)	0.0	0.0	0.8	0.1	0.1	0.0	0.0	0.0	0.5	0.0
<b>Density</b> (gill netting)										
PSD	-	-	-	-	-	-	100.0	-	-	-
RSD (preferred)	10.0	51.0	-	-	-	-	7.0	-	-	-
CPUE (total)	0.6	1.2	-	-	-	-	1.4	-	-	-
CPUE $\geq$ Stock	0.6	1.2	-	-	-	-	1.4	-	-	-
CPUE $\geq$ MLL (15-inches)	0.5	1.0	-	-	-	-	1.4	-	-	-
<b>Growth</b> (gill netting)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	491.0	572.0	-	-	-	-	488.0	-	-	-
<b>Condition</b> (gill netting)										
Stock	110.5	-	-	-	-	-	106.9	-	-	-
Quality	106.6	-	-	-	-	-	105.8	-	-	-
Preferred	103.5	-	-	-	-	-	102.3	-	-	-
Memorable	106.5	-	-	-	-	-	101.4	-	-	-
<b>Mortality</b> (gill netting)										
Total Mortality	40.0%	65.0%	-	-	-	-	42.0%	-	-	-
<b>Stocking</b>										
#	241,242	217,449	282,696	243,454	304,967	123,322	224,398	137,459	85,279	242,276
#/Acre	13.2	11.9	15.5	13.4	16.7	6.8	12.3	7.5	4.7	13.3
<b>Angling Pressure</b> (creel)										
Angler Hours	76,277	47,563	47,563	56,375	63,344	56,935	-	53,846	37,116	-
Angler Hours/Acre	4.19	2.61	2.61	3.09	3.48	3.12	-	2.96	2.04	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.20	0.23	0.16	0.21	0.30	0.42	-	0.17	0.21	-
Harvest Rate (intended)	0.12	0.12	0.09	0.06	0.12	0.14	-	0.10	0.12	-
% Released	36.5%	50.4%	48.1%	67.2%	64.6%	70.5%	-	56.7%	45.9%	-
Mean Weight	2.88	3.16	2.90	2.94	2.42	2.60	-	2.73	3.10	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Walleye	\$323,590	\$254,360	\$254,360	\$278,020	\$313,330	\$240,640	-	\$178,360	\$115,970	-

**Shad, Center Hill Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (electrofishing)										
Alewife CPUE	-	-	-	-	-	-	-	-	-	-
Gizzard CPUE	-	-	128.0	-	-	-	-	-	-	-
Threadfin CPUE	-	-	518.9	-	-	-	-	-	-	-

**Habitat Enhancement, Center Hill Reservoir**

Type of Work	Details	Quantity	
		New	Renovated
none	none	none	none

**Water Quality Monitoring, Center Hill Reservoir**

Parameter	Sampling Period	Water Quality
Temperature	none performed	none performed
Dissolved Oxygen		
PH		
Conductivity		



### Chickamauga Reservoir (2014 Annual Report)

#### Description

**Area (acres):** 35,400

**Mean Depth (feet):**

**Shoreline (miles):** 810

**Counties:** Rhea, Meigs, Bradley, and Polk

**Total Fishing Effort (angler hours):** 544,694

**Total Value by Anglers:** \$4,397,670

#### Summary:

Spring electrofishing surveys were conducted for black bass in Chickamauga in 2014. These surveys are typically conducted on alternate years, thus an electrofishing survey is not planned for the spring of 2015. Annual roving creel surveys were also conducted on Chickamauga in 2014.

Fishing for largemouth bass in Chickamauga Reservoir has a very positive outlook currently. Positive influences possibly affecting the largemouth bass fishery on Chickamauga Reservoir at the present time are increased aquatic vegetation, Florida Largemouth bass (FLMB) stocking program, ample forage base, and good natural recruitment. A Florida largemouth bass stocking project was started in the year 2000 and fish have been stocked annually since inception except for the year 2011 due to the unavailability of FLMB fry. Genetic analyses continue to be conducted to aid in evaluating the success of this project.

In 2014 a considerable multi-week project in the spring was conducted to evaluate the largemouth bass population on Chickamauga. More specifically there were 5 sites (2 riverine- Chickamauga headwaters & Hiwassee River) that were electrofished every 2 weeks between April 2 and June 25. This resulted in the capture of 560 largemouth bass overall (Figure 1). Condition factors ( $W_r$ ) for all size ranges of largemouth bass looked satisfactory as well.

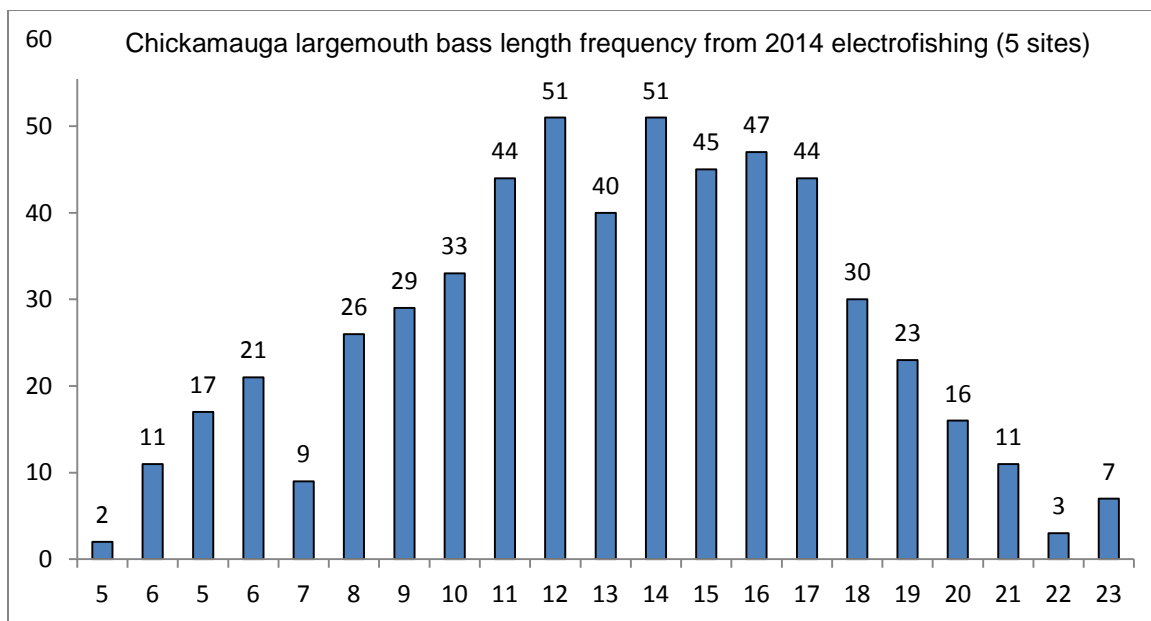


Figure 1. N = 560, Total annual mortality ( $z$ ) = 33% (R-square = 0.84)

Current Regulations = 15" MLL, 5 bass/day

Electrofishing surveys have shown an increase in abundance of largemouth bass  $\geq 15$  inches, especially over the course of the FLMB stocking project which began in the year 2000 (Figure 2 below).

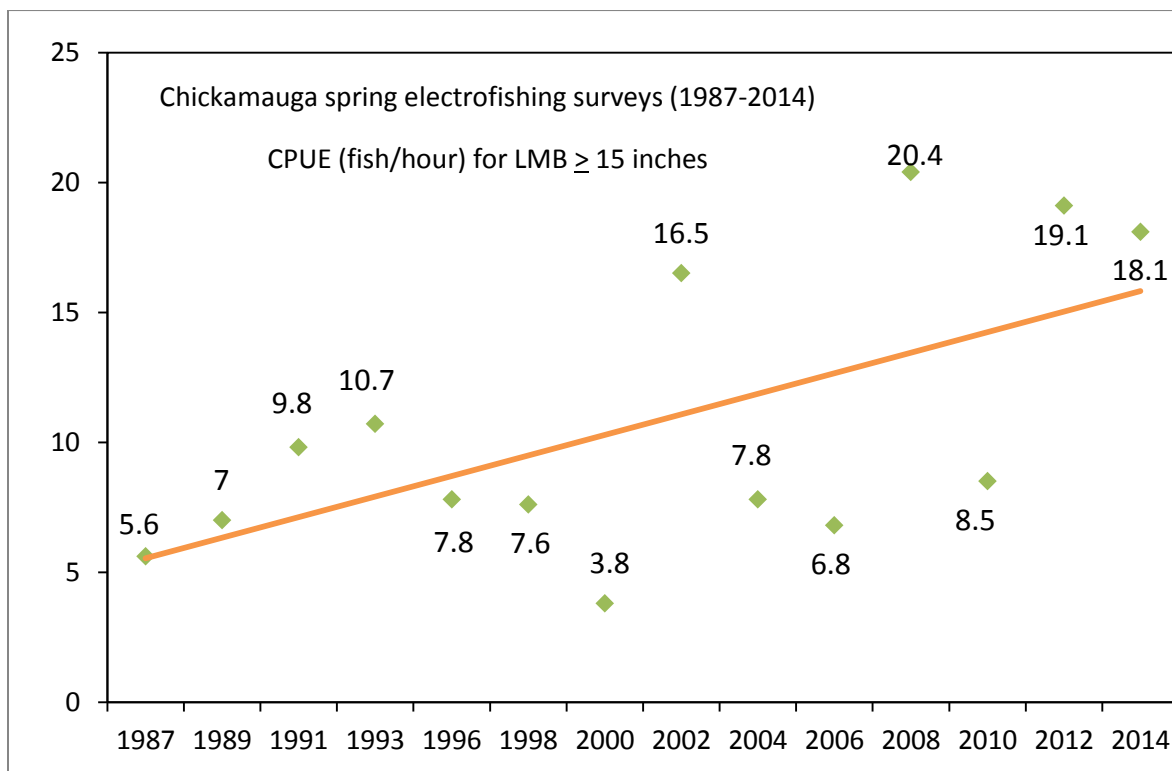
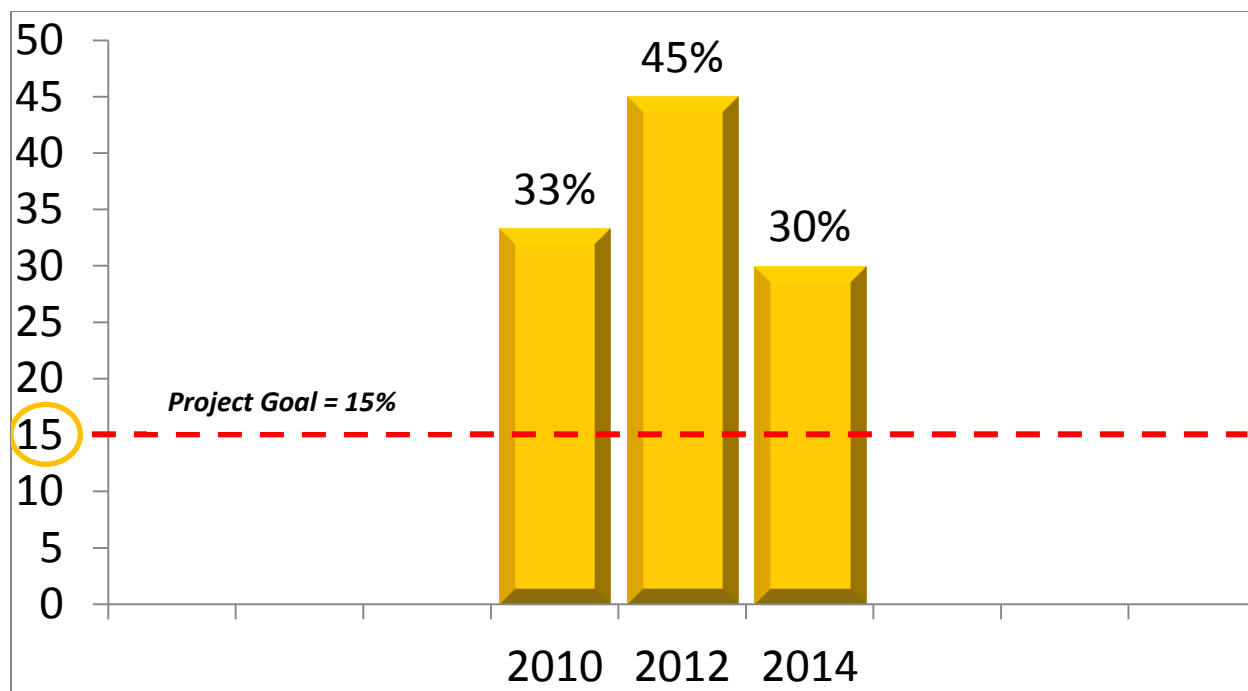


Figure 2

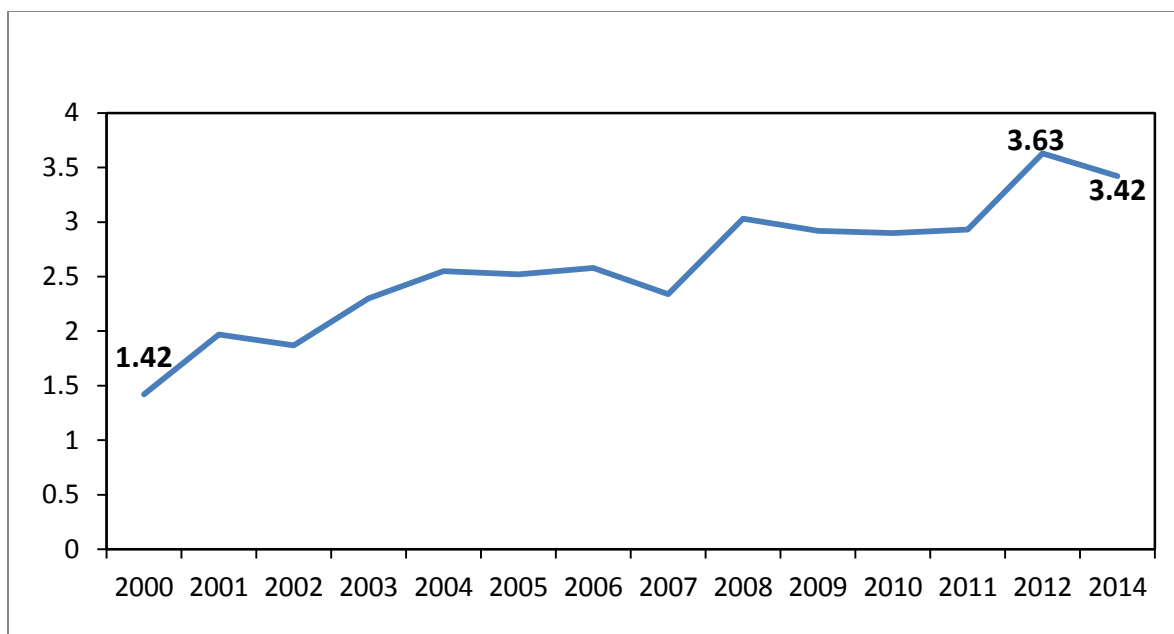
Genetic tests showed that of the 3 non-riverine sites (Richland Creek, Possum Creek and Wolftever Creek) which represented a lakewide evaluation that the LMB genome was comprised of 30% FLMB genes which again surpassed our initial project goal of 15%. Three similar tests in varying areas have confirmed the exceeding of the project goal of 15% contribution of Florida alleles into the largemouth bass genome in Chickamauga Reservoir. (Figure 3).



Percent Florida alleles in the Chickamauga LMB population, Analysis by Greg Moyer, USFWS

Figure 3

Creel surveys showed angling pressure to be near the ten year high at 7.3 hours/acre in 2014. Several fish around the ten pound range were reported at various tournament weigh-ins in 2012. Creel surveys have shown that the average size of LMB caught have more than doubled over the course of the FLMB project (Figure 4). Hopefully, the benefiting factors (aquatic vegetation, growth rates, forage availability, etc.) that are currently present on Chickamauga Reservoir will remain and continue to be conducive to a providing a premier largemouth bass fishery. Long term evaluations of this LMB population will be necessary to fully realize and understand the implications of this FLMB stocking program. No creel surveys were conducted on Chickamauga in the year 2013.



Chickamauga annual roving Creel Survey, Average size of harvested largemouth bass

Figure 4

#### Other species:

Smallmouth bass population numbers on Chickamauga have remained stable and probably could be argued increasing in the last several years in more areas. Targeted night time electrofishing samples have been conducted on Chickamauga Reservoir to evaluate this population in both 2008, 2010 and 2014. CPUE for smallmouth bass for these surveys averaged 20.8 smallmouth/hour which is similar among all 3 years. PSD figures are near the top of the desirable range (70) for all 3 years. More targeted surveys in the future will benefit the management of this population. Also, the current regulation of 18" MLL of 1 fish/day will ensure that ample opportunity is given to smallmouth bass to excel if the right conditions exist.

Only eleven spotted bass were collected in spring electrofishing surveys in 2010. Over the last ten years the average catch rate for SPB in electrofishing surveys on Chickamauga Reservoir have been relatively low. For example, the CPUE for electrofishing in 2010 was 2 fish/hour; in 2012 the overall CPUE was 4.4 and similar in 2014 at 4.9 SPB/hour. In addition, CPUE for YOY fish from 2008 – 2014 mid-summer seining samples were below average as well and exhibiting a downward trend over the past decade. There should still be ample opportunity in regards to angling for spotted bass, especially in the more riverine sections of the river. Decreases in abundance of spotted bass are being realized in all TN River impoundments within Region 3, possibly from a change in water levels due to TVA's Reservoir Operations Study plan which delays the summertime fill to May 15 instead of the traditional April 15. Possibly this has compromised spawning success for spotted bass.

Angling for crappie on Chickamauga Reservoir has been stable and good over the past few years. Currently, catch rates by anglers are above the existing ten year average.

Fall trapnetting surveys conducted in 2014 have shown that black crappie had exhibited the second highest catch rates within the past 10 years. White crappie numbers from the same data survey were nonexistent. Trapnetting continues to be an excellent predictor of year class strength for mainstem reservoirs along the TN River. Crappie fishing on Chickamauga Reservoir continues to be very popular among the fishing public. Black crappie make up 73% of the total crappie harvest according to creel surveys. In 2014, according to our creel surveys, an estimated \$157,090 dollars (trip expenditures) was expended in pursuit of all crappie. This value in 2012 was \$226,600. Creel surveys conducted in 2014 recorded a catch rate of 2.17 crappie/hour with an average weight of 0.76 lbs.

Anglers pursuing panfish such as redear and bluegill will find great opportunities in Chickamauga Reservoir. Redear regulations are in the form of a creel limit of 20 fish/day with no MLL. Bluegill however have no creel or length limit. Because Chickamauga Reservoir is so conducive to these species of fish there are reasonable expectations of a sustainable fishery in these regards. Catch rates for bluegill and redear in 2014 were at 6.53 fish/hour according to an annual roving creel survey. Careful attention is warranted towards affected spawning success due to undesirable spring time water levels. Current full lake levels aren't realized until May 15 which prior to the implementation of TVA's ROS plan was April 15. Our spring surveys show that this one month delay in achieving full lake levels have not allowed redear sunfish to utilized historical, preferred spawning sites. While electrofishing in the spring, we have observed many historic redear spawning sites that are not being used because ample water was not available in time for nesting. Redear and bluegill will continue to be a target for the "meat" fishermen.

Sauger populations can vary considerably due to flow requirements during spawning times. Therefore, in the past there have been annual stockings of sauger fingerlings help to augment the population. These stockings have not always been realized every year due to difficulties realized in raising these fish in our hatchery systems and overall success of collecting brood fish. According to creel surveys, catch rates of 0.02 fish/hour in 2012 were at the lowest point in the past ten years. Fishing success for sauger can be hard to predict because of all the variables (i.e. weather, water flows, access) affecting this fishery during the winter and pre-spring months when sauger are most vulnerable to angling. Due to the limitations acquiring sauger fingerlings for stocking; recently there has been a shift to stocking walleye due to hatchery limitations and the realized benefits of walleye over sauger from an angling perspective (walleye get bigger, live longer and offer more of a year around fishery. Confirmed reports of walleye catches on Chickamauga have been on the increase and is expected to do so with regular annual stockings of walleye. A walleye stocking program upstream in Watts Bar Reservoir that was initiated in 2011 has no doubt contributed to walleye in the upper reaches of Chickamauga Reservoir through dam passage. Sauger densities on the other hand are expected to decrease with overall with the sole dependency being with their natural recruitment and not supplemented with stocking.

Chickamauga continues to be a prime target for those anglers in pursuit of catfish, both sport and commercially. There are three main species for angling; blue, channel, and flathead catfish. The estimated trip expenditures for catfish angling efforts were higher in 2011 than any in the past ten years at a value of \$819,000. That figure fell in 2012 to \$260,000. Roving creel surveys are the main source of data used to evaluate this fishery. All available information points toward a very productive catfish fishery in the future in Chickamauga Reservoir. Trends observed from harvest data collected by annual roving creel surveys show an overall increase in blue catfish harvest and an overall decrease in channel catfish harvest on Chickamauga. Much effort is invested by commercial fishermen and anglers in pursuit of catfish in Chickamauga. Currently there is a catfish study being conducted by Tennessee Tech University

(TTU) that will hopefully answer some questions regarding catfish populations within Chickamauga Reservoir. Several reports of trophy blue catfish continue to be forth coming from catfish anglers who fish Chickamauga in the pursuit thereof.

Anglers spent an estimated \$186,610 in 2014 in pursuit of striped bass in Chickamauga Reservoir. Currently, there is no annual stocking program of striped bass in Chickamauga. However, striped bass stocked in neighboring Watts Bar Reservoir find their way to Chickamauga through dam passage via the lock system. Striped bass congregate in the Watts Bar tailwaters (Chickamauga headwaters) various times per year especially in spring and fall. An abundant amount gizzard and threadfin shad are some of the biggest reasons for this assemblage. Mean weight of striped bass in 2014 at 23.38 lbs. was the highest in the past decade. The average catch rate was 0.87 striped bass/hour. Great fishing for striped bass is expected to remain consistent in Chickamauga Reservoir.

**Lakewide Creel Results**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	559,442	468,429	546,093	493,508	473,068	662,598	659,579	600,092	-	544,694
Angler Hours Per Acre	15.8	13.23	15.43	13.94	13.36	18.72	18.63	16.95	-	15.39
Angler Trips	87,947	71,972	86,785	79,161	74,562	99,749	102,975	97,377	-	81,450
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	\$1,513,210	\$1,208,970	\$1,827,610	\$1,799,390	\$1,470,940	\$1,978,650	\$2,303,930	\$1,924,290	-	\$2,203,520

**Black Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
All Black Bass (hrs)	206,040	187,856	231,148	200,330	190,311	274,393	273,526	255,190	-	258,519
(hrs/acre)	5.82	5.31	6.53	5.66	5.38	7.75	7.73	7.21	-	7.30
Any Black Bass (hrs)	205,374	187,626	231,023	200,330	190,073	273,195	272,540	255,190	-	258,519
(hrs/acre)	5.80	5.30	6.53	5.63	5.37	7.72	7.70	7.21	-	7.30
Largemouth Bass (hrs)	-	230	-	-	238	1,198	986	-	-	2,503
(hrs/acre)	-	0.01	-	-	0.01	0.03	0.03	-	-	0.07
Smallmouth Bass (hrs)	666	-	125	-	-	-	-	-	-	-
(hrs/acre)	0.02	-	0.00	-	-	-	-	-	-	-
Spotted Bass (hrs)	-	-	-	-	-	-	-	-	-	-
(hrs/acre)	-	-	-	-	-	-	-	-	-	-
<b>Tournaments (all black bass)</b>										
# Tournaments (BITE)	19		7							-
Pounds/Angler Day (BITE)	3.1		3.4							-
Bass/Angler Day (BITE)	1.4		1.6							-
Tournament Angler Hrs/Acre (creel)										-
Tournament Catch Rate (creel)	0.43	1.30	1.28	1.34	1.73	1.83	1.10	1.14	-	1.01
Non-Tournament Catch Rate (creel)	1.18	1.05	1.05	1.22	1.08	0.92	0.72	0.83	-	0.60
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	\$680,570	\$563,550	\$900,470	\$1,673,470	\$1,562,860	\$1,837,830	\$2,202,360	\$910,800	-	\$1,445,980
Any Black Bass	\$670,400	\$563,550	\$900,160	\$1,673,470	\$1,562,860	\$1,825,150	\$2,188,450	\$910,800	-	\$1,445,980
Largemouth Bass	\$10,170	-	-	-	-	\$12,680	\$13,910	-	-	\$14,770
Smallmouth Bass	-	-	\$310	-	-	-	-	-	-	-
Spotted Bass	-	-	-	-	-	-	-	-	-	-

Largemouth Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	-	5.50	-	17.20	-	3.63	-	4.50	-	2.99
CPUE (mid-summer seine)	1.20	1.80	1.60	0.50	4.60	5.30	1.80	2.00	3.00	3.50
<b>Density</b> (spring electrofishing)										
PSD (quality)	-	61.0	-	65.0	-	79.0	-	88.0	-	78.6
RSD (preferred)	-	18.0	-	29.0	-	25.0	-	61.0	-	54.8
CPUE (total)	-	43.2	-	89.6	-	38.2	-	40.0	-	45.2
CPUE ≥ Stock	-	37.7	-	72.3	-	34.5	-	36.4	-	40.4
CPUE ≥ MLL (15-inches)	-	6.8	-	48.5	-	8.5	-	32.6	-	18.1
<b>Growth</b> (spring electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	334.0
<b>Condition</b> (spring electrofishing)										
Stock	-	94.1	-	96.9	-	96.5	-	101.7	-	91.7
Quality	-	89.2	-	101.6	-	87.1	-	103.1	-	92.1
Preferred	-	91.4	-	98.1	-	87.2	-	102.2	-	100.6
Memorable	-	82.6	-	97.1	-	96.5	-	101.3	-	97.3
<b>Mortality</b> (spring electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	31.5%
<b>Stocking</b> (Florida LMB)										
#	212,315	195,082	102,034	96,715	199,981	179,767	0	133,966	236,663	76,334
#/Acre	6.00	5.51	2.88	2.73	5.65	5.08	0.00	3.78	6.69	2.16
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (intended)	N/A	1.36	N/A	N/A	0.00	0.48	2.63	N/A	-	0.65
Catch Rate, num./hr (any black bass)	1.15	1.09	1.12	1.18	1.13	1.02	0.89	0.86	-	0.62
Harvest Rate, num./hr (any black bass)	0.09	0.08	0.12	0.06	0.08	0.06	0.08	0.02	-	0.00
% Released	91.1%	92.3%	88.3%	94.5%	93.3%	93.2%	91.5%	97.9%	-	89.4%
Mean Weight	2.52	2.58	2.34	3.03	2.92	2.90	2.93	3.63	-	3.42



**Smallmouth Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	-	-	-	-	-	-	-	-	-	-
CPUE (mid-summer seine)	0.30	0.50	0.00	0.00	0.00	0.00	0.00	0.30	0.30	2.10
<b>Density</b> (spring electrofishing)										
PSD	-	33	-	-	-	-	-	-	-	-
RSD (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (total)	-	1.1	-	-	-	-	-	-	-	-
CPUE ≥ Stock	-	-	-	-	-	-	-	-	-	-
CPUE ≥ Preferred	-	-	-	-	-	-	-	-	-	-
CPUE ≥ MLL (18-inches)	-	-	-	-	-	-	-	-	-	-
<b>Growth</b> (spring electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	-	92.1	-	-	-	-	-	-	-	-
Quality	-	67.6	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality</b> (spring electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (intended)	1.79	N/A	0.00	N/A	N/A	N/A	N/A	N/A	-	N/A
Catch Rate, num./hr (any black bass)	1.15	1.09	1.12	1.18	1.13	1.02	0.89	0.86	-	0.62
Harvest Rate, num./hr (any black bass)	0.09	0.08	0.12	0.06	0.08	0.06	0.08	0.02	-	0.06
% Released	91.1%	92.3%	88.3%	94.5%	97.5%	100.0%	97.8%	95.6%	-	100.0%
Mean Weight	2.52	2.58	2.34	3.03	3.75	N/A	3.63	4.09	-	N/A

**Smallmouth Bass (Target Sample)**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE				0.70		0.40				N/A
<b>Density</b> (electrofishing)										
PSD (quality)				75		70				76
RSD (preferred)				38.0		43.0				61
CPUE (preferred)				-		6.9				16.3
CPUE (total)				18.5		22.3				21.5
CPUE $\geq$ Stock				17.8		21.9				21.5
CPUE $\geq$ Preferred				6.3		9.3				7.5
CPUE $\geq$ MLL (18-inches)				0.7						0.4
<b>Growth</b> (electrofishing)										
Length Age-1										-
Length Age-3										-
<b>Condition</b> (spring electrofishing)										
Stock				82.9		93.6				95.1
Quality				92.7		85.0				84.4
Preferred				87.6		81.0				85.6
Memorable				87.1		80.2				93.4
<b>Mortality</b> (electrofishing)										
Total Mortality										-

Targeted Samples for SMB are at night unless otherwise noted.

**Spotted Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	-	0.90	-	1.10	-	-	-	0.00	-	0.57
CPUE (mid-summer seine)	6.80	3.00	3.10	1.90	1.10	1.30	1.00	1.10	-	1.10
<b>Density</b> (spring electrofishing)										
PSD (quality)	-	27.0	-	71.0	-	-	-	63.0	-	62.3
RSD (preferred)	-	5.0	-	6.0	-	-	-	21.0	-	18.8
CPUE (total)	-	7.3	-	10.0	-	-	-	4.4	-	4.9
CPUE $\geq$ Stock	-	6.4	-	8.9	-	-	-	4.4	-	2.7
<b>Growth</b> (spring electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	-	96.2	-	116.0	-	-	-	106.3	-	101.4
Quality	-	91.2	-	96.0	-	-	-	94.9	-	94.4
Preferred	-	90.7	-	99.0	-	-	-	95.7	-	94.7
<b>Mortality</b> (spring electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (intended)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Catch Rate, num./hr (any black bass)	1.15	1.09	1.12	1.18	1.13	1.02	0.89	0.86	0.86	0.62
Harvest Rate, num./hr (any black bass)	0.09	0.08	0.12	0.06	0.08	0.06	0.08	0.02	0.02	0.06
% Released	91.1%	92.3%	88.3%	94.5%	99.2%	99.6%	99.7%	96.8%	96.8%	97.7%
Mean Weight	2.52	2.58	2.34	3.03	1.52	1.30	2.30	1.90	1.90	1.08

**Black Crappie**

	2005	2006	2007	2008	2009	2010*	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	0.70	0.30	1.20	-	2.80	0.85	0.13	0.00	1.55	2.52
CPUE (mid-summer seine)										0.5
<b>Density</b> (electrofishing)										
										**
PSD (quality)	-	75.0	-	96.0	-	92.0	-	100.0	-	100.0
RSD (preferred)	-	19.0	-	69.0	-	71.0	-	87.0	-	62.0
CPUE (total)	-	9.3	-	13.6	-	161.3	-	4.2	-	3.0
CPUE ≥ Stock	-	9.3	-	13.6	-	148.2	-	4.2	-	-
CPUE ≥ MLL (10-inches)	-	1.9	-	10.2	-	116.0	-	3.6	-	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	285.0	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	-	-	96.4	-	109.4	-	86.1	-	-
Quality	-	-	-	100.4	-	102.0	-	97.1	-	-
Preferred	-	-	-	99.3	-	94.8	-	87.1	-	-
Memorable	-	-	-	96.5	-	91.9	-	84.3	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	78,342	65,524	70,513	40,793	44,290	77,955	73,257	85,180	-	71,938
Angler Hours/Acre	2.21	1.85	1.99	1.15	1.25	2.20	2.07	2.41	-	2.03
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.98	2.14	2.70	2.09	2.39	2.41	2.29	2.51	-	2.17
Harvest Rate (any crappie)	0.74	0.91	1.02	0.84	1.07	1.07	0.88	1.00	-	0.93
% Released (black crappie)	63.6%	61.6%	64.1%	63.1%	56.8%	57.0%	65.1%	60.2%	-	54.7%
Mean Weight (black crappie)	0.82	0.79	0.80	0.84	0.81	0.85	0.88	0.81	-	0.76
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	\$396,380	\$309,050	\$388,630	\$289,610	\$293,460	\$430,240	\$471,190	\$226,610	-	\$157,090

Non-target sample unless otherwise noted.

\* Target Sample

\*\* Data collected from trap netting

White Crappie

	2005	2006	2007	2008	2009	2010*	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	0.05	0.25	0.60	-	3.75	0.75	-	-	0.50	-
CPUE (mid-summer seine)										0.5
<b>Density</b> (electrofishing)										
PSD	-	-	-	-	-	-	-	91.0	-	-
RSD (preferred)	-	-	-	-	-	-	-	45.0	-	-
CPUE (total)	-	-	-	-	-	6.3	-	2.0	-	-
CPUE $\geq$ Stock	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ MLL (10-inches)	-	-	-	-	-	-	-	-	-	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	78,342	65,524	70,513	40,793	44,290	77,955	73,257	85,180	-	71,938
Angler Hours/Acre	2.21	1.85	1.99	1.15	1.25	2.20	2.07	2.41	-	2.03
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.98	2.14	2.70	2.09	2.39	2.41	2.29	2.51	-	2.17
Harvest Rate (any crappie)	0.74	0.91	1.02	0.84	1.07	1.07	0.88	1.00	-	0.93
% Released (w hite crappie)	60.6%	58.5%	68.6%	69.5%	61.2%	58.2%	60.7%	64.5%	-	54.4%
Mean Weight (w hite crappie)	0.75	0.72	0.75	0.87	0.77	0.84	0.83	0.79	-	0.76
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	\$396,380	\$309,050	\$388,630	\$289,610	\$293,460	\$430,240	\$471,190	\$226,610	-	\$157,090

Non-target sample unless otherwise noted.

\* Target Sample

**Blacknose Crappie**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	78,342	65,524	70,513	40,793	44,290	77,955	73,257	85,180	-	71,938
Angler Hours/Acre	2.21	1.85	1.99	1.15	1.25	2.20	2.07	2.41	-	2.03
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.98	2.14	2.70	2.09	2.39	2.41	2.29	2.51	-	2.17
Harvest Rate (any crappie)	0.74	0.91	1.02	0.84	1.07	1.07	0.88	1.00	-	0.93
% Released (blacknose crappie)	-	37.7%	21.3%	100.0%	90.7%	80.7%	45.2%	0.0%	-	N/A
Mean Weight (blacknose crappie)	-	0.75	0.86	-	1.08	1.00	0.65	0.65	-	N/A
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	\$396,380	\$309,050	\$388,630	\$289,610	\$293,460	\$430,240	\$471,190	\$226,610	-	\$157,090

**Sauger**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (gill netting)										
Substock CPUE	-	-	-	-	-	-	-	-	-	-
<b>Density</b> (gill netting)										
PSD	-	-	-	-	-	99.0	-	-	-	-
RSD (preferred)	-	-	-	-	-	71.0	-	-	-	-
CPUE (total)	-	-	-	-	-	9.6	-	-	-	-
CPUE ≥ Stock	-	-	-	-	-	9.6	-	-	-	-
CPUE ≥ MLL (15-inches)	-	-	-	-	-	6.8	-	-	-	-
<b>Growth</b> (gill netting)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (gill netting)										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	91.8	-	-	-	-
Preferred	-	-	-	-	-	102.9	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality</b> (gill netting)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	-	219,619	111,757	166,853	69,699	80,348	70,311	-	-	-
#/Acre	-	6.2	3.2	4.7	2.0	2.3	2.0	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours	9,310	4,389	491	8,829	10,277	3,655	4,012	5,879	-	2,181
Angler Hours/Acre	0.26	0.12	0.01	0.25	0.29	0.10	0.11	0.17	-	0.06
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	1.43	0.53	1.23	2.73	1.23	1.59	1.11	1.14	-	0.02
Harvest Rate (intended)	0.48	0.16	0.19	0.22	0.34	0.56	0.44	0.34	-	0.00
% Released	68.4%	69.8%	85.2%	92.9%	72.5%	71.8%	58.2%	69.0%	-	100.0%
Mean Weight	1.41	1.45	1.50	1.52	1.66	1.67	1.53	1.47	-	N/A
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Sauger	\$39,690	\$23,120	\$3,330	\$43,850	\$83,240	\$17,250	\$22,550	\$16,900	-	\$14,390

**Walleye**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (gill netting)										
Substock CPUE	-	-	-	-	-	-	-	-	-	-
CPUE (mid-summer seine)										0.3
<b>Density</b> (gill netting)										
PSD	-	-	-	-	-	-	-	-	-	-
RSD (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (total)	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ Stock	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ MLL (16-inches)	-	-	-	-	-	-	-	-	-	-
<b>Growth</b> (gill netting)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (gill netting)										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality</b> (gill netting)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	-	-	-	-	-	-	-	-	-	267,247
#/Acre	-	-	-	-	-	-	-	-	-	7.55
<b>Angling Pressure</b> (creel)										
Angler Hours	-	-	-	-	-	-	-	-	-	604
Angler Hours/Acre	-	-	-	-	-	-	-	-	-	0.02
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	-	-	-	-	-	-	-	-	-	0.28
Harvest Rate (intended)	-	-	-	-	-	-	-	-	-	0.00
% Released	-	-	-	-	-	-	-	-	-	100.0%
Mean Weight	-	-	-	-	-	-	-	-	-	N/A
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Walleye	-	-	-	-	-	-	-	-	-	\$1,060



**Striped Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (gill netting)										
Substock CPUE										
<b>Density</b> (gill netting)										
PSD										
RSD (preferred)										
CPUE (total)										
CPUE $\geq$ Stock										
CPUE $\geq$ 15-inches										
<b>Growth</b> (gill netting)										
Length Age-2										
Length Age-3										
<b>Condition</b> (gill netting)										
Stock										
Quality										
Preferred										
Memorable										
<b>Mortality</b> (gill netting)										
Total Mortality										-
<b>Stocking</b>										
#							50,623			-
#/Acre							1.4			-
<b>Angling Pressure</b> (creel)										
Angler Hours	21,050	17,318	8,908	19,563	10,582	16,386	14,870	17,221	-	12,156
Angler Hours/Acre	0.59	0.49	0.25	0.55	0.30	0.46	0.42	0.49	-	0.34
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	1.26	0.77	0.44	0.58	0.43	0.84	0.43	0.73	-	0.87
Harvest Rate (intended)	0.27	0.24	0.17	0.21	0.10	0.11	0.02	0.00	-	0.01
% Released	77.5%	72.6%	63.3%	66.0%	78.9%	88.4%	94.7%	93.9%	-	96.6%
Mean Weight	14.77	15.76	19.71	15.38	16.09	17.86	15.96	13.84	-	23.38
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Striped Bass	\$168,770	\$118,900	\$86,030	\$214,510	\$91,570	\$295,510	\$295,420	\$282,470	-	\$186,610

**Bluegill**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE		0.00								-
CPUE (mid-summer seine)						17.6	6.10	13.6	10.9	8.00
Substock CPUE (trap netting)										15.05
<b>Density</b> (electrofishing)										
PSD		34.0								-
RSD (preferred)		4.0								-
CPUE (total)		35.3								-
CPUE $\geq$ Stock		35.3								-
<b>Growth</b> (electrofishing)										
Length Age-1										-
Length Age-3										-
<b>Condition</b> (electrofishing)										
Stock		95.2								-
Quality		96.4								-
Preferred		94.9								-
Memorable		-								-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (anysunfish)	10,521	8,193	3,889	963	2,589	2,237	2,157	1,460	-	16,177
Angler Hours/Acre	0.30	0.23	0.11	0.03	0.07	0.06	0.06	0.04	-	0.46
<b>Fishing Success</b> (creel)										
Catch Rate (any sunfish)	6.86	6.77	11.30	12.01	6.60	9.29	8.23	12.98	-	6.53
Harvest Rate (any sunfish)	4.32	4.04	6.45	5.21	2.32	2.61	5.43	6.98	-	3.19
% Released (bluegill)	60.0%	64.3%	68.8%	71.6%	73.6%	81.2%	76.7%	74.3%	-	61.0%
Mean Weight (bluegill)	0.26	0.26	0.27	0.26	0.25	0.27	0.25	0.25	-	0.23
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Sunfish	\$20,650	\$32,300	\$17,610	\$1,920	\$20,920	\$21,480	\$20,530	\$4,140	-	\$32,870

Non-target sample unless otherwise noted.

**Redear**

	2005	2006	2007	2008	2009	2010	2011	2012*	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE		0.60		0.40				0.00		-
CPUE (mid-summer seine)						0.6	0.80	0.40	1.80	0.40
Substock CPUE (trap netting)										9.65
<b>Density</b> (electrofishing)										
PSD		55.0		48.0		37.0		59.0		-
RSD (preferred)		12.0		11.0		0.0		1.0		-
CPUE (total)		28.6		39.5		17.6		65.2		-
CPUE $\geq$ Stock		28.0		39.1		17.6		65.2		-
<b>Growth</b> (electrofishing)										
Length Age-1										-
Length Age-3										-
<b>Condition</b> (electrofishing)										
Stock		95.7		86.2						-
Quality		90.3		87.5						-
Preferred		89.6		85.5						-
Memorable		-								-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (anysunfish)	10,521	8,193	3,889	963	2,589	2,237	2,157	1,460	-	16,177
Angler Hours/Acre	0.30	0.23	0.11	0.03	0.07	0.06	0.06	0.04	-	0.46
<b>Fishing Success</b> (creel)										
Catch Rate (any sunfish)	6.86	6.77	11.30	12.01	6.60	9.29	8.23	12.98	-	6.53
Harvest Rate (any sunfish)	4.32	4.04	6.45	5.21	2.32	2.61	5.43	6.98	-	3.19
% Released (redeer)	37.6%	39.9%	35.0%	34.7%	52.4%	35.1%	56.2%	40.8%	-	46.2%
Mean Weight (redeer)	0.36	0.55	0.38	0.48	0.43	0.36	0.39	0.37	-	0.33
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Sunfish	\$20,650	\$32,300	\$17,610	\$1,920	\$20,920	\$21,480	\$20,530	\$4,140	-	\$32,870

Non-target sample unless otherwise noted.

\* Broodfish collection. No weights were taken.

**Catfish**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all catfish)	116,267	76,182	101,168	100,324	99,968	148,757	153,140	108,984	-	90,299
Angler Hours/Acre	3.28	2.15	2.86	2.83	2.82	4.20	4.33	3.08	-	2.55
<b>Fishing Success</b> (creel)										
Catch Rate (any catfish)	1.36	2.16	1.85	1.48	1.42	1.23	1.04	1.30	-	1.35
Harvest Rate (any catfish)	0.91	1.45	1.12	0.63	0.70	0.54	0.34	0.49	-	0.33
% Released (channel)	43.3%	40.9%	45.0%	56.2%	50.5%	51.2%	77.6%	47.8%	-	70.8%
Mean Weight (channel)	3.01	2.96	3.16	3.29	3.34	3.37	3.20	3.26	-	3.15
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Catfish	\$483,080	\$340,270	\$660,490	\$730,840	\$717,470	\$811,940	\$819,040	\$260,000	-	\$233,300

**Shad**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (electrofishing)										
Alewife CPUE										-
Gizzard CPUE				17.1				15.3		-
Gizzard CPUE (mid-summer seine)										1.1
Threadfin CPUE				26.7				6.7		-
Threadfin CPUE (mid-summer seine)										1.5

**Habitat Enhancement - 2014**

Type of Work	Details	Quantity	
		New	Renovated
None performed			

**Water Quality Monitoring - 2014**

Parameter	Sampling Period	Water Quality
Temperature		
Dissolved Oxygen		
PH		
Conductivity		

**Cordell Hull Reservoir (2014 Annual Report)****Description**

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**Area (acres):** 13,920      **Mean Depth (feet):**      **Shoreline (miles):** 381**Counties:** Smith, Jackson, Clay**Full Pool Elevation (feet-msl):** 504      **Winter Pool Elevation (feet-msl):** 499**Dam Completion:** 1973**Summary:**

Spring electrofishing surveys were conducted for black bass on Center Hill in 2014. These surveys are typically conducted here on alternate years, thus the next electrofishing survey is planned for the spring of 2016 on Cordell Hull Reservoir. Additionally no creel surveys have been conducted on Cordell Hull since 2012.

Excellent opportunities exist currently for catching largemouth bass in Cordell Hull Reservoir. Good numbers of gizzard and threadfin shad have helped sustain this fishery. However, past high levels of aquatic vegetation presence has not been as consistent with regards to density as of late and will surely have some impact fisheries, especially black bass. Future spring electrofishing surveys will continue to evaluate the black bass fishery on Cordell Hull. Our mid-summer seining surveys were off the charts in 2010 with a CPUE of 22.1 largemouth bass/seine haul but much lower in the recent 2014 survey at 3.9/hr. Overall CPUE for lmb collected during our spring electrofishing surveys for the past five years are consistent and at a favorable rate. If the right population and environmental parameters stay in place, a quality lmb fishery should be sustained in Cordell Hull Reservoir. According to a roving creel survey conducted in 2012, fishermen expended an estimated \$246,000 in pursuit of bass in Cordell Hull and experienced a catch rate on the average of 2.08 fish/hour. Future creel surveys on Cordell Hull will be recommended.

Smallmouth bass in Cordell Hull are not as prevalent as largemouth bass but their occurrence has remained persistent over the past several years. They continue to show up in spring electrofishing surveys at an average CPUE over the last ten years of 4.8 fish/hour. Although Cordell Hull is probably not a destination for smallmouth bass anglers, it is anticipated that anglers will have real possibilities of catching smallmouth bass while angling there. Several rocky banks along Cordell Hull offer really good smallmouth bass habitat.

Spotted bass are not observed in our various data collection surveys. However pre-impoundment studies showed a population of spotted bass in rivers that would later incorporate into Cordell Hull Reservoir. Possible depletion of preferred spawning areas and habitat due to establishing the reservoir are to blame for the apparent absence of spotted bass currently.

Crappie fishing in Cordell Hull Reservoir remains average overall. According to the last roving creel survey conducted in 2012, the average catch rate for crappie was 1.65 fish/hour. Anglers spent an estimated \$63,000 in pursuit of crappie in 2012 at Cordell Hull. Traditionally, Cordell Hull has predominantly been a white crappie reservoir. However, some "black nose" black crappie and black crappie also appear in anglers' catch. Blacknose crappie were stocked into Cordell Hull Reservoir several

years ago by TWRA with fish raised at a fish pond located McClure's Bend and a small pond above Celina, both adjacent to Cordell Hull Reservoir which allowed direct flow in stocking.

Good bluegill fishing opportunities exist for anglers fishing Cordell Hull. According to our creel surveys in 2012, the catch rates were low compared to other reservoirs with like characteristics. Mid-summer seining surveys conducted in 2014 yielded a CPUE of 56.9 bluegill/seine haul, the third highest in the past ten years. Bluegill and longear sunfish continue to exhibit good population densities at Cordell Hull.

Cordell Hull offers some excellent opportunities for anglers in the pursuit of sauger. Currently sauger populations are self-sustaining in Cordell Hull with no enhancement from stocking. This is one of the few reservoirs in the state that can boast of such stability when referencing sauger populations. An estimated \$69,000 was spent with on trip expenditures in 2012 in pursuit of this fish.

A limited amount of walleye are caught in Cordell Hull Reservoir each year. The closely related sauger is more abundant at Cordell Hull and thus provides a greater opportunity for anglers. The state and world record came from neighboring (below Cordell Hull) Old Hickory Reservoir back in 1960. This record walleye weighed 25 lbs.

Catfishing on Cordell Hull is not as popular as in other reservoirs across the state and also in comparison to other game species of fish within this reservoir. Creel surveys in 2012 indicated low catch rates of 0.16 fish/hour with an average weight of 1.89 lbs. Anglers should expect fair success pursuing catfish in this reservoir.

TWRA continues to stock striped bass annually in Cordell Hull Reservoir. Also, great numbers of gizzard and threadfin shad continue to provide a forage base very conducive to a trophy striped bass fishery. The state record striped bass weighing 65 lb. 6 oz. was caught in Cordell Hull Reservoir in the year 2000 by a Mr. Ralph H. Dallas. Current work on the Wolf Creek Dam in Kentucky on the upper end of Cordell Hull Reservoir has changed flow regimes within the reservoir. It is thought that this also has had influence on striped bass behaviors possibly making attempted spawning runs or seeking thermal refuges. Attempts to gillnet for striped bass have been challenging over the last few years. Because of TWRA's annual stocking program of striped bass here, excellent opportunities for angling should persist. A roving creel survey conducted in 2012 showed very low pressure in pursuit of striped bass on this reservoir and only an estimated \$14,000 expended in pursuit of this species. The state of Kentucky has benefited greatly from the striped bass stocking program due to these Cordell Hull fish seeking forage and thermal refuges in their waters.

**Lakewide Angling Summary**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	-	-	-	-	-	-	178,710	192,583	-	-
Angler Hours Per Acre	-	-	-	-	-	-	14.9	16.1	-	-
Angler Trips	-	-	-	-	-	-	34,967	36,435	-	-
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	-	-	-	-	-	-	575,830	610,090	-	-

**Black bass, Cordell Hull Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
All Black Bass (hrs)	-	-	-	-	-	-	78,904	62,137	-	-
(hrs/acre)	-	-	-	-	-	-	7	4	-	-
Any Black Bass (hrs)	-	-	-	-	-	-	75,685	60,386	-	-
(hrs/acre)	-	-	-	-	-	-	6	4	-	-
Largemouth Bass (hrs)	-	-	-	-	-	-	3,219	459	-	-
(hrs/acre)	-	-	-	-	-	-	0	0	-	-
Smallmouth Bass (hrs)	-	-	-	-	-	-	-	1,292	-	-
(hrs/acre)	-	-	-	-	-	-	-	0	-	-
Spotted Bass (hrs)	-	-	-	-	-	-	-	-	-	-
(hrs/acre)	-	-	-	-	-	-	-	-	-	-
<b>Tournaments (all black bass)</b>										
# Tournaments (BITE)	1	-	-	-	-	-	-	-	-	-
Pounds/Angler Day (BITE)	1.2	-	-	-	-	-	-	-	-	-
Bass/Angler Day (BITE)	0.7	-	-	-	-	-	-	-	-	-
Tournament Angler Hrs/Acre (creel)				-	-	-	-	-	-	-
Tournament Catch Rate (creel)	-	-	-	-	-	-	1.2	0.7	-	-
Non-Tournament Catch Rate (creel)	-	-	-	-	-	-	0.6	0.6	-	-
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	-	-	-	-	-	-	\$556,380	\$248,750	-	-
Any Black Bass	-	-	-	-	-	-	\$535,420	\$245,860	-	-
Largemouth Bass	-	-	-	-	-	-	\$20,960	\$2,330	-	-
Smallmouth Bass	-	-	-	-	-	-	-	\$560	-	-
Spotted Bass	-	-	-	-	-	-	-	-	-	-



**Largemouth Bass, Cordell Hull Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	-	46.80	-	16.40	-	2.00	-	7.00	-	0.67
CPUE (Mid-summer seine)	7.00	3.10	7.10	7.90	1.10	22.10	1.30	3.80	3.50	3.90
<b>Density</b> (spring electrofishing)										
PSD	-	-	-	48.0	-	40.0	-	50.0	-	64.4
RSD (preferred)	-	23.0	-	12.0	-	17.0	-	24.0	-	22.2
CPUE (total)	-	95.4	-	98.8	-	89.4	-	75.0	-	43.8
CPUE ≥ Stock	-	48.6	-	82.4	-	87.4	-	68.0	-	43.1
CPUE ≥ Preferred	-	16.8	-	-	-	15.0	-	16.4	-	9.6
<b>Growth</b> (spring electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	-	92.0	-	95.8	-	87.3	-	90.7	-	85.5
Quality	-	94.0	-	96.5	-	89.8	-	89.8	-	85.9
Preferred	-	101.0	-	99.2	-	96.6	-	97.5	-	92.6
Memorable	-	101.0	-	98.7	-	100.9	-	99.6	-	99.6
<b>Mortality</b> (spring electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	-	-	-	-	-	-	1.42	2.08	-	-
Harvest Rate (intended)	-	-	-	-	-	-	0.42	0.00	-	-
% Released	-	-	-	-	-	-	78.6%	77.3%	-	-
Mean Weight	-	-	-	-	-	-	1.35	1.31	-	-

**Smallmouth Bass, Cordell Hull Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	-	1.20	-	0.60	-	0.00	-	-	-	-
CPUE (mid-summer seine)	0.30	0.80	-	-	0.10	-	0.00	0.10	0.10	0.10
<b>Density</b> (spring electrofishing)										
PSD	-	50.0	-	77.0	-	52.0	-	-	-	-
RSD (preferred)	-	38.0	-	19.0	-	43.0	-	-	-	-
CPUE (preferred)	-	-	-	-	-	1.2	-	-	-	-
CPUE (total)	-	4.4	-	5.8	-	4.6	-	1.8	-	1.6
CPUE $\geq$ Stock	-	3.2	-	5.6	-	4.6	-	-	-	-
CPUE $\geq$ Preferred	-	-	-	1.0	-	2.0	-	-	-	-
CPUE $\geq$ MLL (18-inches)	-	1.4	-	-	-	-	-	-	-	-
<b>Growth</b> (spring electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	-	89.5	-	90.3	-	153.7	-	-	-	-
Quality	-	85.5	-	87.8	-	78.2	-	-	-	-
Preferred	-	89.9	-	89.3	-	80.9	-	-	-	-
Memorable	-	93.5	-	86.6	-	77.6	-	-	-	-
<b>Mortality</b> (spring electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	-	-	-	-	-	-	-	0.00	-	-
Harvest Rate (intended)	-	-	-	-	-	-	-	0.00	-	-
% Released	-	-	-	-	-	-	84.2%	22.3%	-	-
Mean Weight	-	-	-	-	-	-	1.50	3.40	-	-

**White Crappie, Cordell Hull Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014*
<b>Recruitment</b>										
Substock CPUE (Trap netting)	-	0.00	-	-	-	-	-	-	-	0.00
CPUE (mid-summer seine)	-	-	-	-	-	-	-	-	-	0.10
<b>Density (electrofishing)</b>										
PSD	-	-	-	96.0	-	-	-	-	-	81.5
RSD (preferred)	-	68.0	-	96.0	-	-	-	-	-	59.3
CPUE (total)	-	5.6	-	5.4	-	-	-	2.4	-	11.7
CPUE ≥ Stock	-	5.6	-	5.4	-	-	-	-	-	11.7
CPUE ≥ MLL (10-inches)	-	3.4	-	-	-	-	-	-	-	7.0
<b>Growth (electrofishing)</b>										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition (electrofishing)</b>										
Stock	-	-	-	-	-	-	-	-	-	85.1
Quality	-	98.2	-	-	-	-	-	-	-	85.7
Preferred	-	91.2	-	-	-	-	-	-	-	87.1
Memorable	-	88.4	-	-	-	-	-	-	-	96.3
<b>Mortality (electrofishing)</b>										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	-	-	-	-	-	-	-	-	-	-
#/Acre	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure (creel)</b>										
Angler Hours (all crappie)	-	-	-	-	-	-	25,735	25,635	-	-
Angler Hours/Acre	-	-	-	-	-	-	2.2	1.84	-	-
<b>Fishing Success (creel)</b>										
Catch Rate (any crappie)	-	-	-	-	-	-	1.85	1.65	-	-
Harvest Rate (any crappie)	-	-	-	-	-	-	0.59	0.47	-	-
% Released (w hite crappie)	-	-	-	-	-	-	73.6%	64.2%	-	-
Mean Weight (w hite crappie)	-	-	-	-	-	-	0.86	0.76	-	-
<b>Value of Fishery (Trip Expenditures - creel)</b>										
All Crappie	-	-	-	-	-	-	\$111,020	\$63,170	-	-

Non-target sample unless otherwise noted.

\* - Targeted sample

**Black Crappie, Cordell Hull Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014*
<b>Recruitment</b>										
Substock CPUE (Trap netting)	-	-	-	-	-	-	-	-	-	0.00
CPUE (mid-summer seine)	-	-	-	-	-	-	-	-	-	0.50
<b>Density (electrofishing)</b>										
PSD	-	-	-	-	-	-	-	-	-	-
RSD (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (total)	-	-	-	-	-	-	-	0.4	-	0.4
CPUE ≥ Stock	-	-	-	-	-	-	-	-	-	-
CPUE ≥ MLL (10-inches)	-	-	-	-	-	-	-	-	-	-
<b>Growth (electrofishing)</b>										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition (electrofishing)</b>										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality (electrofishing)</b>										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	-	-	-	-	-	-	-	-	-	-
#/Acre	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure (creel)</b>										
Angler Hours (all crappie)	-	-	-	-	-	-	25735.0	25,635	-	-
Angler Hours/Acre	-	-	-	-	-	-	2.2	1.84	-	-
<b>Fishing Success (creel)</b>										
Catch Rate (any crappie)	-	-	-	-	-	-	1.9	1.65	-	-
Harvest Rate (any crappie)	-	-	-	-	-	-	0.6	0.47	-	-
% Released (black crappie)	-	-	-	-	-	-	0.6	71.2%	-	-
Mean Weight (black crappie)	-	-	-	-	-	-	0.9	0.78	-	-
<b>Value of Fishery (Trip Expenditures - creel)</b>										
All Crappie	-	-	-	-	-	-	111020.0	\$63,170	-	-

Non-target sample unless otherwise noted.

\* - Targeted sample

**Blacknose Crappie, Cordell Hull Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014*
<b>Recruitment</b>										
Substock CPUE (Trap netting)	-	-	-	-	-	-	-	-	-	0.00
CPUE (mid-summer seine)	-	-	-	-	-	-	-	-	-	0.40
<b>Density (electrofishing)</b>										
PSD	-	-	-	-	-	-	-	-	-	-
RSD (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (total)	-	-	-	-	-	-	-	0.6	-	0.4
CPUE > Stock	-	-	-	-	-	-	-	-	-	-
CPUE > MLL (10-inches)	-	-	-	-	-	-	-	-	-	-
<b>Growth (electrofishing)</b>										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition (electrofishing)</b>										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality (electrofishing)</b>										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	-	-	-	-	-	-	-	-	-	-
#/Acre	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure (creel)</b>										
Angler Hours (all crappie)	-	-	-	-	-	-	25,735	25,635	-	-
Angler Hours/Acre	-	-	-	-	-	-	2.2	1.8	-	-
<b>Fishing Success (creel)</b>										
Catch Rate (any crappie)	-	-	-	-	-	-	2	1.65	-	-
Harvest Rate (any crappie)	-	-	-	-	-	-	0.6	0.47	-	-
% Released (blacknose crappie)	-	-	-	-	-	-	1	43.6%	-	-
Mean Weight (blacknose crappie)	-	-	-	-	-	-	0.9	0.77	-	-
<b>Value of Fishery (Trip Expenditures - creel)</b>										
All Crappie	-	-	-	-	-	-	\$111,020	\$63,170	-	-

Non-target sample unless otherwise noted.

\* - Targeted sample

**Bluegill, Cordell Hull Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE	-	-	-	-	-	-	-	-	-	6.3
CPUE (mid-summer seine)	7.3	92.8	48.6	13.9	9.8	107.3	8.3	30.8	22.9	56.9
<b>Angling Pressure (creel)</b>										
Angler Hours (all sunfish)	-	-	-	-	-	-	5,311	13,379	-	-
Angler Hours/Acre	-	-	-	-	-	-	0.44	1.0	-	-
<b>Fishing Success (creel)</b>										
Catch Rate (any sunfish)	-	-	-	-	-	-	2.65	1.25	-	-
Harvest Rate (any sunfish)	-	-	-	-	-	-	0.90	0.90	-	-
% Released (bluegill)	-	-	-	-	-	-	78.2%	23.1%	-	-
Mean Weight (bluegill)	-	-	-	-	-	-	0.30	0.29	-	-
<b>Value of Fishery (Trip Expenditures - creel)</b>										
All Sunfish	-	-	-	-	-	-	\$28,000	\$40,050	-	-

**Sauger, Cordell Hull Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (gill netting)	-	-	-	-	-	0.00		0.00	-	-
CPUE (midsummer seine)	-	0.80	0.30	-	0.00	0.00	0.00	0.00	0.00	-
<b>Density (gill netting)</b>										
PSD	-	-	-	-	-	100.0	-	-	-	-
RSD (preferred)	-	-	-	-	-	70.0	-	-	-	-
CPUE (total)	-	-	-	-	-	-	-	0.3	-	-
CPUE ≥ Stock	-	-	-	-	-	-	-	-	-	-
CPUE ≥ MLL (15-inches)	-	-	-	-	-	-	-	-	-	-
<b>Growth (gill netting)</b>										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition (gill netting)</b>										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality (gill netting)</b>										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	-	-	-	-	-	-	-	-	-	-
#/Acre	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure (creel)*</b>										
Angler Hours	-	-	-	-	-	-	19,322	25,396	-	-
Angler Hours/Acre	-	-	-	-	-	-	1.62	1.82	-	-
<b>Fishing Success (creel)</b>										
Catch Rate (intended)	-	-	-	-	-	-	0.56	0.80	-	-
Harvest Rate (intended)	-	-	-	-	-	-	0.22	0.35	-	-
% Released	-	-	-	-	-	-	58.2%	41.1%	-	-
Mean Weight	-	-	-	-	-	-	1.53	1.95	-	-
<b>Value of Fishery (Trip Expenditures - creel)</b>										
Sauger	-	-	-	-	-	-	\$82,870	\$69,380	-	-

**Walleye, Cordell Hull Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (gill netting)	-	-	-	-	-	-	-	-	-	-
CPUE (midsummer seine)	-	-	-	-	-	-	-	-	-	0.10
<b>Density (gill netting)</b>										
PSD	-	-	-	-	-	-	-	-	-	-
RSD (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (total)	-	-	-	-	-	-	-	-	-	-
CPUE ≥ Stock	-	-	-	-	-	-	-	-	-	-
CPUE ≥ MLL (15-inches)	-	-	-	-	-	-	-	-	-	-
<b>Growth (gill netting)</b>										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition (gill netting)</b>										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality (gill netting)</b>										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	-	-	-	-	-	-	-	-	-	113,835
#/Acre	-	-	-	-	-	-	-	-	-	8.2
<b>Angling Pressure (creel)*</b>										
Angler Hours	-	-	-	-	-	-	-	-	-	-
Angler Hours/Acre	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success (creel)</b>										
Catch Rate (intended)	-	-	-	-	-	-	-	-	-	-
Harvest Rate (intended)	-	-	-	-	-	-	-	-	-	-
% Released	-	-	-	-	-	-	-	-	-	-
Mean Weight	-	-	-	-	-	-	-	-	-	-
<b>Value of Fishery (Trip Expenditures - creel)</b>										
Walleye	-	-	-	-	-	-	-	-	-	-



**Catfish, Cordell Hull Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all catfish)	-	-	-	-	-	-	5,169	5,689	-	-
Angler Hours/Acre	-	-	-	-	-	-	0.43	0.4	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (any catfish)	-	-	-	-	-	-	0.10	0.16	-	-
Harvest Rate (any catfish)	-	-	-	-	-	-	0.10	0.16	-	-
% Released (channel)	-	-	-	-	-	-	9.1%	0.0%	-	-
Mean Weight (channel)	-	-	-	-	-	-	1.92	1.89	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Catfish	-	-	-	-	-	-	\$19,960	\$20,020	-	-

**Shad, Cordell Hull Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (electrofishing)										
Alewife CPUE	-	-	-	-	-	-	-	-	-	-
Gizzard CPUE	-	-	-	89.5	-	-	-	21.3	-	119.2
Threadfin CPUE	-	-	-	30.9	-	-	-	6.3	-	13.2

**Striped Bass, Cordell Hull Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (gill netting)	-	-	-	-	-	-	-	-	-	-
CPUE (mid-summer seine)	-	-	-	-	-	0.1	0	-	0	-
<b>Density (gill netting)</b>										
PSD	-	-	-	-	-	-	-	-	-	-
RSD (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (total)	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ Stock	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ 15-inches	-	-	-	-	-	-	-	-	-	-
<b>Growth (gill netting)</b>										
Length Age-2	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition (gill netting)</b>										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality (gill netting)</b>										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	84,478	79,887	154,772	60,168	119,185	92,205	81,977	107,825	75,559	86,015
#/Acre	6.07	5.74	11.12	4.32	8.56	6.62	5.89	7.75	5.43	6.17
<b>Angling Pressure (creel)</b>										
Angler Hours	-	-	-	-	-	-	364	2,495	-	-
Angler Hours/Acre	-	-	-	-	-	-	0.03	0.2	-	-
<b>Fishing Success (creel)</b>										
Catch Rate (intended)	-	-	-	-	-	-	0.87	0.00	-	-
Harvest Rate (intended)	-	-	-	-	-	-	0.49	0.00	-	-
% Released	-	-	-	-	-	-	30.5%	100.0%	-	-
Mean Weight	-	-	-	-	-	-	4.95	-	-	-
<b>Value of Fishery (Trip Expenditures - creel)</b>										
Striped Bass	-	-	-	-	-	-	\$3,840	\$14,200	-	-

**Habitat Enhancement, Cordell Hull Reservoir**

Type of Work	Details	Quantity	
		New	Renovated
Fish Attractor Work	Harvested cedar trees	9	1
	for placement around TWRA bouys		

**Water Quality Monitoring, Cordell Hull Reservoir**

Parameter	Sampling Period	Water Quality
Temperature	none taken	none taken
Dissolved Oxygen	none taken	none taken
PH	none taken	none taken
Conductivity	none taken	none taken

### Dale Hollow Reservoir (2014 Annual Report)

#### Description

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**Area (acres):** 27,700      **Mean Depth (feet):**      **Shoreline (miles):** 620

**Counties:** Clay, Pickett, Overton, and Fentress Counties, TN also in Clinton and Cumberland Counties, KY.

**Full Pool Elevation (feet-msl):** 651      **Winter Pool Elevation (feet-msl):** 631

**Dam Completion:** 1943

#### Summary:

Fishing success for largemouth bass has remained stable over the past few years. According to creel surveys in 2014, catch rates by anglers were the second highest in the past ten years at an average catch rate of 0.75 lmb/hour. The average weight of harvested largemouth bass in 2014 was 2.59 lbs. The presence of various species of aquatic vegetation and available forage such as shad should aid in promoting and sustaining this fishery. Of concern are the high values for PSD and RSD 15 values for largemouth bass in Dale Hollow Reservoir which indicates a population heavily weighted by larger fish and possible recruitment problems. This unbalance as displayed by PSD and RSD values has been consistent in Dale Hollow over the past three decades. Spring electrofishing surveys for black bass are scheduled to be conducted in the spring of 2015 and are typically performed on an every other year basis.

Smallmouth bass fishing on Dale Hollow Reservoir continues to offer some of the best opportunities anywhere. According to the creel surveys conducted in 2014, catch rates for anglers were 0.39 fish/hour. In addition, the mid-summer seining surveys in 2013 yielded a 10 year high with a catch rate of 2.20 smb/seine haul. This same catch rate was lower at 0.90 smb/seine haul in 2014 collections. Multiple year classes of smallmouth were observed. The summer of 2012 brought with it a realized fish die-off that for the most part claimed mortality on smallmouth bass. The areas which harbored most observed dead smb were from mid-reservoir to the dam. Smallmouth bass and largemouth bass were tested and determined negative for diseases, bacteria and viruses. The most likely culprit would be some type of environmental factors associated with the severe drought during these summer months. A targeted and regular spring electrofishing survey was conducted in 2013. CPUE for stock size smallmouth bass and below were above the ten year averages. The current size structure of smallmouth bass in Dale Hollow (2013) offers great promise for strong year classes entering the 16-21" slot limit. Anglers at Dale Hollow Reservoir in pursuit of smallmouth bass spent an estimated \$679,010 on trip expenditures according to 2014 annual roving creel surveys.

Catch rates for spotted bass obtained from creel surveys remain stable when compared to the ten year average. Mean weight, however, for harvested spotted bass was lower than the ten year average. There is no minimum length limit on spotted bass currently on Dale Hollow. There are no reasons perceived that prevent the spotted bass fishery from offering consistent success as in years past. Catch rates for young of year spotted bass from summer seining efforts showed a catch rate of 2 spb/seine haul which is near the ten year average (CPUE = 1.94).

White crappie populations in Dale Hollow Reservoir are not as prevalent as the black crappie populations, including blacknose crappie, which are stocked annually by TWRA. According to past surveys, white

crappie was the dominant species of crappie in Dale Hollow in the early 1970's. It is estimated that crappie anglers expended an estimated \$99,790 in 2014 on Dale Hollow Reservoir in pursuit of crappie. According to creel surveys conducted in 2014, the catch rates by anglers for crappie were at a rate of 0.86 crappie/hour which is the second lowest in the past ten years. Crappie spawning success is very limited on Dale Hollow and that is not expected to change. Crappie fishing success on Dale Hollow is expected to remain consistent however thanks to the continued annual stocking program of blacknose crappie by TWRA.

Fishing success for redear sunfish on Dale Hollow Reservoir remains good with some very nice fish being caught every year around the month of May. Reports with pictures from fishermen confirm the quality of the redear fishery here. According to creel surveys; harvest rates and mean weights associated with redear sunfish remain near average when compared to the last ten years. Catch rates by anglers showed an increase according to our creel surveys in 2014.

Fishing success for bluegill should continue to be promising in Dale Hollow Reservoir. Mid- summer seining surveys showed low reproduction of bluegill in 2014, second lowest in the ten year average. Catch rates and harvest rates for "any sunfish" by anglers remain slightly below ten year averages but consistent according to roving creel surveys.

Numerous fishing reports from the fishing public and marinas on Dale Hollow Reservoir confirmed a banner fishing year for walleye in 2012. Our creel surveys in 2014 indicate that there was an estimated \$82,340 dollars expended by walleye anglers on Dale Hollow Reservoir. This figure is below the ten year average. Catch rates for walleye in 2014 were the highest recorded in the past ten years according to creel surveys at a rate of 0.36 walleye/hour. The average weight of harvested walleye was well above the ten year average of 4.22 lbs in 2014. Annual stockings of walleye have promoted consistency in successful year classes of walleye at Dale Hollow. With continued natural reproduction from lake and river spawning walleye populations enhanced with stockings, fishing success in Dale Hollow should remain very good for walleye. Also ample forage bases comprised of threadfin and gizzard shad as well as alewife should ensure appropriate forage bases.

Although, anglers in pursuit of catfish in Dale Hollow Reservoir compromise a smaller percentage of the intended angling public here, overall success for catfish remains consistent. The average weight of catfish captured in the 2014 creel survey was 5.24 lbs Angling pressure is extremely low when compared to other game fish within this reservoir.

**Lakewide Angling Summary**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	344,202	406,030	380,868	335,407	376,584	334,592	353,631	368,307	298,648	283,231
Angler Hours Per Acre	14.8	17.5	16.5	14.6	16.3	14.4	15.1	16	12.8	12.2
Angler Trips	56,930	64,852	61,059	52,750	60,319	52,744	56,777	59,434	46,463	45,441
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	2,576,880	3,221,020	3,479,300	2,954,030	2,803,660	2,309,480	2,833,440	2,859,300	2,422,100	2,340,910

**Black bass, Dale Hollow Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
All Black Bass (hrs)	196,851	243,051	235,115	216,960	233,738	205,517	223,261	189,256	162,233	164,986
(hrs/acre)	7.11	8.77	8.49	7.83	8.44	7.42	8.06	6.83	5.86	5.96
Any Black Bass (hrs)	74,347	79,087	73,017	69,658	80,698	67,753	84,840	77,442	70,785	73,491
(hrs/acre)	2.68	2.86	2.64	2.51	2.91	2.45	3.06	2.80	2.56	2.65
Largemouth Bass (hrs)	829	1,007	2,295	2,736	1,676	1,872	4,399	2,407	3,669	7,889
(hrs/acre)	0.03	0.04	0.08	0.10	0.06	0.07	0.16	0.09	0.13	0.29
Smallmouth Bass (hrs)	121,331	162,636	159,490	144,566	151,266	135,722	133,899	109,407	87,779	83,042
(hrs/acre)	4.38	5.87	5.76	5.22	5.46	4.90	4.83	3.95	3.17	3.00
Spotted Bass (hrs)	344	321	313	-	98	170	123	-	-	564
(hrs/acre)	0.01	0.01	0.01	-	0.04	0.06	0.04	-	-	0.02
<b>Tournaments (all black bass)</b>										
# Tournaments (BITE)										
Pounds/Angler Day (BITE)										
Bass/Angler Day (BITE)										
Tournament Angler Hrs/Acre (creel)										
Tournament Catch Rate (creel)	0.14	0.22	0.38	0.33	0.18	0.38	0.62	0.49	0.53	0.67
Non-Tournament Catch Rate (creel)	0.33	0.35	0.47	0.30	0.29	0.39	0.51	0.47	0.33	0.44
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	\$499,236	\$1,542,140	\$1,588,010	\$2,267,080	\$2,123,640	\$1,688,400	\$2,138,230	\$1,197,550	\$1,125,410	\$1,132,180
Any Black Bass	\$418,660	\$432,830	\$444,800	\$751,010	\$678,140	\$444,780	\$683,980	\$413,300	\$451,700	\$404,960
Largemouth Bass	\$6,050	\$2,190	\$15,950	\$24,400	\$7,070	\$14,530	\$17,090	\$11,000	\$13,270	\$47,660
Smallmouth Bass	\$72,526	\$1,106,230	\$1,126,270	\$1,491,670	\$1,437,840	\$1,228,100	\$1,433,300	\$773,250	\$660,440	\$679,010
Spotted Bass	\$2,000	\$890	\$990	-	\$590	\$990	\$3,860	-		\$550

**Largemouth Bass, Dale Hollow Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	0.40	-	0.20	-	0.00	-	-	-	-	-
CPUE (mid-summer seine)	1.00	0.50	0.20	0.60	1.50	0.80	0.40	0.00	1.30	0.40
<b>Density</b> (spring electrofishing)										
PSD	83.0	-	84.0	-	95.0	-	-	-	91.0	-
RSD (preferred)	46.0	-	47.0	-	68.0	-	-	-	61.0	-
CPUE (total)	8.4	-	15.0	-	3.8	-	-	-	24.6	-
CPUE $\geq$ Stock	7.4	-	14.8	-	3.8	-	-	-	24.6	-
CPUE $\geq$ MLL (15-inches)	3.6	-	6.8	-	2.6	-	-	-	18.5	-
<b>Growth</b> (spring electrofishing)										
Length Age-1						-	-	-	-	-
Length Age-3	352.0	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	94.0	-	96.6	-	-	-	-	-	98.1	-
Quality	100.2	-	129.5	-	-	-	-	-	90.2	-
Preferred	95.8	-	94.3	-	-	-	-	-	88.7	-
Memorable	90.0	-	89.0	-	-	-	-	-	66.6	-
<b>Mortality</b> (spring electrofishing)										
Total Mortality	31.0%	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (intended)	0.10	0.00	0.67	0.35	0.42	0.41	0.39	0.22	0.86	0.75
Catch Rate, num./hr (any black bass)	0.35	0.39	0.46	0.33	0.29	0.42	0.49	0.42	0.52	0.68
Harvest Rate, num./hr (any black bass)	0.05	0.08	0.11	0.10	0.06	0.05	0.09	0.07	0.07	0.16
% Released	83.1%	73.1%	74.2%	77.1%	78.1%	89.1%	88.3%	81.0%	83.6%	80.2%
Mean Weight	2.86	2.67	2.81	2.70	2.73	3.08	2.57	2.74	2.60	2.59

**Smallmouth Bass, Dale Hollow Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	3.20	-	1.20	-	1.60				0.95	-
CPUE (mid-summer seine)	0.50	1.40	1.40	1.40	0.70	1.60	1.90	0.40	2.20	0.90
<b>Density</b> (spring electrofishing)										
PSD	46.0	-	61.0	-	80.0	-	-	-	72.0	-
RSD (preferred)	28.0	-	23.0	-	58.0	-	-	-	53.0	-
CPUE (preferred)	-	-	-	-	5.8	-	-	-	3.1	-
CPUE (total)	24.5	-	14.6	-	11.6	-	-	-	23.8	-
CPUE $\geq$ Stock	24.0	-	13.2	-	10.0	-	-	-	22.9	-
CPUE $\geq$ Preferred	-	-	-	-	-	-	-	-	11.1	-
CPUE $\geq$ MLL (18-inches)	-	-	-	-	-	-	-	-	1.9	-
<b>Growth</b> (spring electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	310.0	-	-	-	-	-	-	-	274.0	-
<b>Condition</b> (spring electrofishing)										
Stock	93.3	-	89.3	-	-	-	-	-	96.2	-
Quality	97.0	-	92.4	-	-	-	-	-	82.1	-
Preferred	93.1	-	91.2	-	-	-	-	-	78.0	-
Memorable	96.3	-	87.4	-	-	-	-	-	77.7	-
<b>Mortality</b> (spring electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	41.0%	-
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (intended)	0.25	0.33	0.46	0.33	0.29	0.36	0.50	0.46	0.25	0.39
Catch Rate, num./hr (any black bass)	0.35	0.39	0.46	0.33	0.29	0.42	0.49	0.42	0.52	0.68
Harvest Rate, num./hr (any black bass)	0.05	0.08	0.11	0.10	0.06	0.05	0.01	0.07	0.07	0.16
% Released	83.1%	73.1%	74.2%	77.1%	96.9%	95.3%	95.8%	94.3%	95.1%	97.4%
Mean Weight	2.86	2.67	2.81	2.70	2.44	2.34	1.82	2.00	1.62	2.14



**Smallmouth Bass (Targeted), Dale Hollow Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE							0.54	-	0.95	-
<b>Density</b> (electrofishing)										
PSD							94	-	85	-
RSD (preferred)							70.0	-	52.0	-
CPUE (preferred)							6.4	-	2.4	-
CPUE (total)							9.2	-	29.4	-
CPUE $\geq$ Stock							9.2	-	28.4	-
CPUE $\geq$ Preferred							6.4	-	14.4	-
<b>Growth</b> (electrofishing)										
Length Age-1							-	-	-	-
Length Age-3							-	-	277.0	-
<b>Condition</b> (electrofishing)										
Stock							95.4	-	81.5	-
Quality							92.0	-	81.8	-
Preferred							94.7	-	87.8	-
Memorable							95.1	-	86.8	-

**Spotted Bass, Dale Hollow Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	0.40	-	0.60	-	1.20	-	-		-	-
CPUE (mid-summer seine)	0.50	0.70	1.70	4.80	1.70	1.70	2.90	0.00	3.40	2.00
<b>Density (spring electrofishing)</b>										
PSD	69.0	-	70.0	-	12.0	-	-	-	-	-
RSD (preferred)	32.0	-	29.0	-	5.0	-	-	-	-	-
CPUE (total)	14.2		13.5		7.8	-	-	-	4.4	-
CPUE $\geq$ Stock	13.7	-	11.8	-	6.8	-	-	-	-	-
<b>Growth (spring electrofishing)</b>										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	298.0	-	-	-	-	-	-	-	-	-
<b>Condition (spring electrofishing)</b>										
Stock	99.1	-	100.5	-	-	-	-	-	-	-
Quality	100.3	-	103.7	-	-	-	-	-	-	-
Preferred	97.9	-	101.3	-	-	-	-	-	-	-
<b>Mortality (spring electrofishing)</b>										
Total Mortality	46.0%	-	-	-	-	-	-	-	-	-
<b>Fishing Success (creel)</b>										
Catch Rate, num./hr (intended)	0.00	0.00	1.79	N/A	0.00	0.33	5.56	N/A	N/A	0.56
Catch Rate, num./hr (any black bass)	0.35	0.39	0.46	0.33	0.29	0.42	0.49	0.42	0.52	0.68
Harvest Rate, num./hr (any black bass)	0.05	0.08	0.11	0.10	0.06	0.05	0.09	0.07	0.07	0.16
% Released	83.1%	73.1%	74.2%	77.1%	64.3%	67.7%	69.5%	55.6%	79.8%	72.9%
Mean Weight	2.86	2.67	2.81	2.70	1.55	1.28	1.38	1.36	1.48	1.30

**White Crappie, Dale Hollow Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	-	-	-	-	-	-	-	-	-	-
<b>Density</b> (electrofishing)										
PSD	-	-	-	-	-	-	-	-	-	-
RSD (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (total)	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ Stock	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ MLL (10-inches)	-	-	-	-	-	-	-	-	-	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	-	-	-	-	-	-	-	-	-	-
#/Acre	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	43,340	49,442	39,224	32,267	33,847	43,254	44,467	41,981	26,502	30,968
Angler Hours/Acre	1.6	1.8	1.4	1.2	1.2	1.6	1.6	1.5	1.0	1.1
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.13	1.24	0.96	0.89	0.83	1.08	1.61	1.01	1.06	0.86
Harvest Rate (any crappie)	0.50	0.68	0.55	0.33	0.45	0.39	0.57	0.39	0.38	0.44
% Released (w hite crappie)	69.3%	47.2%	56.0%	-	40.8%	63.9%	86.3%	62.1%	100.0%	100.0%
Mean Weight (w hite crappie)	0.63	0.90	1.02	-	1.00	0.81	0.78	0.86	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	\$172,630	\$220,270	\$175,720	\$183,200	\$144,230	\$196,230	\$229,760	\$131,770	\$91,450	\$99,790

**Black Crappie, Dale Hollow Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	-	-	-	-	-	-	-	-	-	-
<b>Density</b> (electrofishing)										
PSD	-	-	-	-	-	-	-	-	-	-
RSD (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (total)	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ Stock	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ MLL (10-inches)	-	-	-	-	-	-	-	-	-	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	-	-	-	-	-	-	-	-	-	-
#/Acre	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	43,340	49,442	39,224	32,267	33,847	43,254	44,467	41,981	26,502	30,968
Angler Hours/Acre	1.56	1.78	1.42	1.16	1.22	1.56	1.61	1.52	0.96	1.12
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.13	1.24	0.96	0.89	0.83	1.08	1.61	1.01	1.06	0.86
Harvest Rate (any crappie)	0.50	0.68	0.55	0.33	0.45	0.39	0.57	0.39	0.38	0.44
% Released (black crappie)	61.6%	42.0%	23.2%	56.7%	35.9%	44.5%	58.7%	60.4%	67.7%	37.8%
Mean Weight (black crappie)	0.88	1.12	1.06	1.00	1.16	1.00	0.98	1.06	0.94	0.95
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	\$172,630	\$220,270	\$175,720	\$183,200	\$144,230	\$196,230	\$229,760	\$131,770	\$91,450	\$99,790

**Blacknose Crappie, Dale Hollow Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	-	-	-	-	-	-	-	-	-	-
<b>Density</b> (electrofishing)										
PSD	-	-	-	-	-	-	-	-	-	-
RSD (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (total)	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ Stock	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ MLL (10-inches)	-	-	-	-	-	-	-	-	-	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	209,774	310,398	241,584	169,318	257,613	182,571	106,580	127,766	179,636	213,110
#/Acre	7.6	11.2	8.7	6.1	9.3	6.6	3.8	4.6	6.5	7.7
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	43,340	49,442	39,224	32,267	33,847	43,254	44,467	41,981	26,502	30,968
Angler Hours/Acre	1.6	1.8	1.4	1.2	1.2	1.6	1.6	1.5	1.0	1.1
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.13	1.24	0.96	0.89	0.83	1.08	1.61	1.01	1.06	0.86
Harvest Rate (any crappie)	0.50	0.68	0.55	0.33	0.45	0.39	0.57	0.39	0.38	0.44
% Released (blacknose crappie)	48.3%	34.0%	26.9%	54.9%	42.1%	52.5%	56.8%	39.0%	48.4%	36.7%
Mean Weight (blacknose crappie)	1.02	1.22	1.18	1.27	1.28	1.19	0.98	1.09	0.96	1.11
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	\$172,630	\$220,270	\$175,720	\$183,200	\$144,230	\$196,230	\$229,760	\$131,770	\$91,450	\$99,790

Non-target sample unless otherwise noted.

**Sunfish, Dale Hollow Reservoir****Bluegill**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
CPUE (mid-summer seine)	3.50	2.20	3.20	3.40	5.00	5.90	10.80	8.90	3.10	2.60
<b>Angling Pressure (creel)</b>										
Angler Hours (all sunfish)	19,768	24,081	17,160	21,051	23,134	24,384	25,256	42,960	45,167	33,221
Angler Hours/Acre	0.71	0.87	0.62	0.76	0.84	0.88	0.91	1.55	1.63	1.20
<b>Fishing Success (creel)</b>										
Catch Rate (any sunfish)	2.75	3.51	3.42	2.94	3.14	2.80	2.96	2.03	1.67	2.57
Harvest Rate (any sunfish)	1.69	2.28	2.35	1.97	2.26	1.87	1.80	1.47	1.08	1.64
% Released (bluegill)	47.7%	36.1%	45.8%	40.0%	36.8%	43.8%	49.1%	32.6%	48.4%	55.0%
Mean Weight (bluegill)	0.35	0.35	0.43	0.41	0.41	0.42	0.46	0.40	0.40	0.44
<b>Value of Fishery (Trip Expenditures - creel)</b>										
All Sunfish	\$79,070	\$70,960	\$114,270	\$102,920	\$96,120	\$79,580	\$112,210	\$147,400	\$198,260	\$64,550

**Redear**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
CPUE (mid-summer seine)	0.25	0.00	0.10	0.00	0.20	0.20	0.00	0.00	0.00	-
<b>Angling Pressure (creel)</b>										
Angler Hours (all sunfish)	19,768	24,081	17,160	21,051	23,134	24,384	25,256	42,960	45,167	33,221
Angler Hours/Acre	0.71	0.87	0.62	0.76	0.84	0.88	0.91	1.55	1.63	1.20
<b>Fishing Success (creel)</b>										
Catch Rate (any sunfish)	2.75	3.51	3.42	2.94	3.14	2.80	2.96	2.03	1.67	2.57
Harvest Rate (any sunfish)	1.69	2.28	2.35	1.97	2.26	1.87	1.80	1.47	1.08	1.64
% Released (redeer)	25.2%	26.0%	19.2%	19.5%	14.4%	25.3%	26.0%	16.6%	23.1%	23.5%
Mean Weight (redeer)	0.43	0.63	0.50	0.61	0.63	0.59	0.57	0.56	0.48	0.50
<b>Value of Fishery (Trip Expenditures - creel)</b>										
All Sunfish	\$79,070	\$70,960	\$114,270	\$102,920	\$96,120	\$79,580	\$112,210	\$147,400	\$198,260	\$64,550

**Catfish, Dale Hollow Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all catfish)	4,448	4,374	4,865	4,306	6,839	4,776	3,539	7,861	6,135	8,951
Angler Hours/Acre	0.16	0.16	0.18	0.16	0.25	0.17	0.13	0.28	0.22	0.32
<b>Fishing Success</b> (creel)										
Catch Rate (any catfish)	0.26	0.50	0.51	0.59	0.35	0.44	0.28	0.27	0.32	0.44
Harvest Rate (any catfish)	0.26	0.50	0.51	0.59	0.33	0.44	0.28	0.27	0.32	0.44
% Released (channel)	17.6%	11.9%	2.6%	2.6%	11.1%	6.3%	2.6%	3.3%	0.9%	2.1%
Mean Weight (channel)	4.59	3.77	4.29	4.86	4.62	4.23	4.77	4.99	4.20	5.24
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Catfish		\$10,870		\$22,780	\$26,630	\$14,470	\$11,110	\$14,770	\$16,060	\$27,040

**Walleye, Dale Hollow Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (gill netting)	0.00	-	0.01	-	-	-	-	0.00	-	-
CPUE (mid-summer seine)	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	-	-
<b>Density (gill netting)</b>										
PSD	-	-	-	-	-	-	-	100	-	-
RSD (preferred)	40	-	23	-	-	-	-	60	-	-
CPUE (total)	0.4	-	0.8	-	-	-	-	0.8	-	-
CPUE $\geq$ Stock	0.4	-	0.8	-	-	-	-	0.8	-	-
CPUE $\geq$ MLL (16-inches)	0.1	-	0.8	-	-	-	-	0.8	-	-
<b>Growth (gill netting)</b>										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	548.0	-	-	-	-	-	-	-	-	-
<b>Condition (gill netting)</b>										
Stock	106.1	-	99.7	-	-	-	-	98.9	-	-
Quality	101.3	-	101.0	-	-	-	-	97.8	-	-
Preferred	106.7	-	99.8	-	-	-	-	99.7	-	-
Memorable	109.4	-	99.1	-	-	-	-	93.2	-	-
<b>Mortality (gill netting)</b>										
Total Mortality	20.0%	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	323,173	90,990	449,439	277,368	370,917	152,568	265,656	145,831	194,342	211,035
#/Acre	11.7	3.3	16.2	10.0	13.4	5.5	9.6	5.3	7.0	7.6
<b>Angling Pressure (creel)</b>										
Angler Hours	30,104	32,859	37,049	34,411	40,975	37,891	32,506	39,692	37,904	23,935
Angler Hours/Acre	1.09	1.19	1.34	1.24	1.48	1.37	1.17	1.43	1.36	0.86
<b>Fishing Success (creel)</b>										
Catch Rate (intended)	0.22	0.27	0.31	0.32	0.31	0.35	0.28	0.18	0.15	0.36
Harvest Rate (intended)	0.18	0.19	0.26	0.23	0.23	0.22	0.24	0.16	0.14	0.17
% Released	18.8%	29.0%	15.3%	32.4%	27.1%	39.0%	15.8%	9.4%	8.2%	66.0%
Mean Weight	3.65	4.30	3.26	3.65	3.50	3.02	3.28	3.53	3.71	4.22
<b>Value of Fishery (Trip Expenditures - creel)</b>										
Walleye	\$168,920	\$213,390	\$307,330	\$208,930	\$230,060	\$187,700	\$176,240	\$149,390	\$99,970	\$82,340



**Muskie, Dale Hollow Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours	855	-	-	887	399	360	-	1,255	-	179
Angler Hours/Acre	0.03	-	-	0.03	0.01	0.01	-	0.05	-	0.01
<b>Fishing Success</b> (creel)										
Catch Rate	0.07	0.00	-	0.12	0.00	0.00	-	0.00	-	0.00
Harvest Rate	0.00	0.00	-	0.08	0.00	0.00	-	0.00	-	0.00
% Released	100.0%	-	-	56.4%	-	N/A	-	N/A	-	100.0%
Mean Weight	-	-	-	24.00	-	N/A	-	N/A	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Muskie	\$6,740	\$5,770	-	\$12,120	\$6,660	\$2,810	-	\$6,710	-	\$420

**Shad, Dale Hollow Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (electrofishing)										
Alewife CPUE	-	-	-	-	-	-	-	-	-	-
Gizzard CPUE	-	-	26.7	-	-	-	-	-	-	45.0
Threadfin CPUE	-	-	65.3	-	-	-	-	-	-	-

**Habitat Enhancement, Dale Hollow Reservoir**

Type of Work	Details	Quantity	
		New	Renovated
none	none	none	none

**Water Quality Monitoring, Dale Hollow Reservoir**

Parameter	Sampling Period	Water Quality
Temperature	none performed	none performed
Dissolved Oxygen		
PH		
Conductivity		

### Great Falls Reservoir (2014 Annual Report)

#### Description

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**Area (acres):** 2,110      **Mean Depth (feet):**      **Shoreline (miles):** 120

**Counties:** Warren, White and Van Buren

**Full Pool Elevation (feet-msl):** 805      **Winter Pool Elevation (feet-msl):** 778

**Dam Completion:** 1916

#### Summary:

For the first time an annual roving creel survey was conducted on Great Falls Reservoir in 2014.

Favorable reproduction success for largemouth bass has been evident for the majority of the past few years on Great Falls Reservoir according to electrofishing surveys and mid-summer seining surveys. Highly variable water level fluctuations in the spring at Great Falls will continue to be of concern for positive spawning conditions. Electrofishing survey results conducted in 2013 revealed catch rates of sub-stock size largemouth bass at a rate lower than the average conducted in the last ten years. This could signify a poor spawn from the previous year. The mid-summer seining surveys have not yielded any YOY largemouth bass in 2013 or 2014 surveys. PSD and RSD15 values have consistently remained in the desired range(s) over the past ten years exemplifying a population that is in balance. Good shoreline habitat and ample forage have also help promote successful year classes of largemouth bass. The recently implemented 15" minimum length limit established in 2011 will hopefully offset perceived increases in fishing pressure in Great Falls. Thanks to the creel survey conducted in 2014, there is now baseline data established that we can compare to in the future regarding pressure and other measures. According to the 2014 creel survey the mean weight for largemouth bass caught by anglers was 1.92 lbs with an average catch rate of 0.49 lmb/hour for "any black bass". Largemouth bass fishing in Great Falls Reservoir should remain good in the upcoming years. Spring electrofishing surveys are scheduled for 2015 and are typically conducted every other spring for black bass surveys.

There are not enough smallmouth bass in Great Falls Reservoir to warrant any attention at this time.

Fishing for spotted bass in Great Falls Reservoir is probably not an intended species due to small population numbers when compared to largemouth bass population numbers. The mid-summer seining surveys indicate good years of reproduction in 2008, 2009, and 2010. Unfortunately, these same mid-summer seining surveys showed very low catch rates for young of the year spotted bass in the years 2011-2013 and no catches in 2014. More data will be collected from spotted bass during our spring electrofishing surveys in 2015. Data from the 2014 creel survey shows that the mean weight of harvested spotted bass was 0.91 lbs.

Crappie fishing success remains stable on Great Falls Reservoir. White crappie are the dominant species of crappie at Great Falls. A targeted electrofishing survey for crappie was conducted in 2014. Abundance and condition factors were favorable for crappie surveyed. The 2014 creel survey showed that on average anglers caught crappie at an average of 1.15 fish/hour with the mean weight being 0.91 lbs. Anglers also expended \$27,610 in trip expenditures in pursuit of crappie.

Blacknose black crappies (BNC) have been stocked into Great Falls reservoir since the year 2011 and this project was evaluated in 2014 by electrofishing and possibly creel. The creel survey in 2014 and

electrofishing surveys targeted at crappie yielded no BNC. Therefore, hopes of establishing a BNC fishery at Great Falls via stocking and also a great potential BNC brood source have been unfounded. Due to this unrealized presence of BNC no more allocations for stocking BNC will be recommended further.

A high occurrence of young of the year bluegill was realized in the 2013 and 2014 mid-summer seining samples. However, it is not expected for Great Falls Reservoir to be a top destination for bluegill fishermen. Hopefully a roving creel survey can be conducted on Great Falls Reservoir in 2014 to further evaluate this fishery. A catch rate by anglers of 1.76 sunfish/hour was realized in 2014 according to creel surveys.

Walleye were stocked several years ago (2005 and previous) by TWRA into Great Falls Reservoir. Gill netting surveys geared at evaluating this project never realized any walleye. No confirmed catches of walleye by anglers have been confirmed at Great Falls reservoir either even according to the 2014 creel survey conducted on Great Falls Reservoir.

Angler effort and catch rates were both low in regards to catfish on Great Falls Reservoir according to the 2014 creel surveys. Both channel catfish and flathead catfish can be anticipated for the catch while pursuing catfish at Great Falls.

**Lakewide Angling Summary**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours										36,448
Angler Hours Per Acre										17.3
Angler Trips										7,947
<b>Value of Fishery (angler expenditures creel)</b>										
All Species										91,070

**Black bass, Great Falls Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014*
<b>Angling Pressure</b>										
All Black Bass (hrs)	-	-	-	-	-	-	-	-	-	13,181
(hrs/acre)	-	-	-	-	-	-	-	-	-	6.25
Any Black Bass (hrs)	-	-	-	-	-	-	-	-	-	12,768
(hrs/acre)	-	-	-	-	-	-	-	-	-	6.05
Largemouth Bass (hrs)	-	-	-	-	-	-	-	-	-	413
(hrs/acre)	-	-	-	-	-	-	-	-	-	0.20
Smallmouth Bass (hrs)	-	-	-	-	-	-	-	-	-	-
(hrs/acre)	-	-	-	-	-	-	-	-	-	-
Spotted Bass (hrs)	-	-	-	-	-	-	-	-	-	-
(hrs/acre)	-	-	-	-	-	-	-	-	-	-
<b>Tournaments (all black bass)</b>										
# Tournaments (BITE)	-	-	-	-	-	-	-	-	-	-
Pounds/Angler Day (BITE)	-	-	-	-	-	-	-	-	-	-
Bass/Angler Day (BITE)	-	-	-	-	-	-	-	-	-	-
Tournament Angler Hrs/Acre (creel)	-	-	-	-	-	-	-	-	-	-
Tournament Catch Rate (creel)	-	-	-	-	-	-	-	-	-	0.46
Non-Tournament Catch Rate (creel)	-	-	-	-	-	-	-	-	-	0.50
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	-	-	-	-	-	-	-	-	-	\$40,210
Any Black Bass	-	-	-	-	-	-	-	-	-	\$39,160
Largemouth Bass	-	-	-	-	-	-	-	-	-	\$1,050
Smallmouth Bass	-	-	-	-	-	-	-	-	-	-
Spotted Bass	-	-	-	-	-	-	-	-	-	-

\*Year-long creel begins

**Largemouth Bass, Great Falls Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	12.25	-	18.50	-	21.20	-	7.25	-	7.00	-
CPUE (mid-summer seine)	0.00	16.50	3.50	0.00	63.00	27.00	0.50	0.00	-	-
<b>Density</b> (spring electrofishing)										
PSD	58	-	45	-	61	-	54	-	54	-
RSD (preferred)	19.0	-	5.0	-	13.0	-	16.0	-	12.0	-
CPUE (total)	31.8	-	17.5	-	34.8	-	31.8	-	32.3	-
CPUE $\geq$ Stock	31.8	-	14.0	-	13.5	-	24.5	-	25.3	-
CPUE $\geq$ MLL (15-inches)	9.0	-	1.8	-	1.8	-	4.0	-	3.0	-
<b>Growth</b> (spring electrofishing)										
Length Age-1						-	-	-	-	-
Length Age-3	312.0	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	91.4	-	86.4	-	94.3	-	94.5	-	93.0	-
Quality	89.3	-	87.2	-	94.5	-	88.5	-	86.1	-
Preferred	91.6	-	85.0	-	91.2	-	87.9	-	83.7	-
Memorable	97.5	-	-	-	110.4	-	-	-	89.7	-
<b>Mortality</b> (spring electrofishing)										
Total Mortality	27.0%	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (intended)	-	-	-	-	-	-	-	-	-	0.29
Catch Rate, num./hr (any black bass)	-	-	-	-	-	-	-	-	-	0.49
Harvest Rate, num./hr (any black bass)	-	-	-	-	-	-	-	-	-	0.08
% Released	-	-	-	-	-	-	-	-	-	91.4%
Mean Weight	-	-	-	-	-	-	-	-	-	1.92

**Spotted Bass, Great Falls Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	2.80	-	0.30	-	6.25	-	3.75	-	2.25	-
CPUE (mid-summer seine)	8.50	17.00	4.50	33.00	29.50	57.50	5.50	13.00	3.00	-
<b>Density</b> (spring electrofishing)										
PSD	31	-	25	-	25	-	43	-	38	-
RSD (preferred)	4.0	-	0.0	-	0.0	-	13.0	-	6.0	-
CPUE (total)	27.8	-	9.8	-	8.3	-	11.3	-	6.3	-
CPUE $\geq$ Stock	19.3	-	5.3	-	2.0	-	7.5	-	4.0	-
<b>Growth</b> (spring electrofishing)										
Length Age-1								-	-	-
Length Age-3	275.0	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	98.2	-	95.7	-	86.4	-	95.1	-	102.1	-
Quality	99.3	-	95.7	-	88.4	-	100.3	-	96.2	-
Preferred	95.6	-	98.1	-	-	-	87.1	-	41.8	-
<b>Mortality</b> (spring electrofishing)										
Total Mortality	53.0%	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (intended)	-	-	-	-	-	-	-	-	-	-
Catch Rate, num./hr (any black bass)	-	-	-	-	-	-	-	-	-	0.49
Harvest Rate, num./hr (any black bass)	-	-	-	-	-	-	-	-	-	0.08
% Released	-	-	-	-	-	-	-	-	-	82.9%
Mean Weight	-	-	-	-	-	-	-	-	-	0.91

**White Crappie, Great Falls Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014*
<b>Recruitment</b> (electrofishing)										
Substock CPUE	-	-	-	-	-	-	-	-	-	-
<b>Density</b> (electrofishing)										
PSD	-	-	-	-	-	-	-	-	-	100.0
RSD (preferred)	-	-	-	-	-	-	-	-	-	88.3
CPUE (total)	-	-	-	-	-	-	-	-	4.5	31.8
CPUE $\geq$ Stock	-	-	-	-	-	-	-	-	-	31.8
CPUE $\geq$ MLL (10-inches)	-	-	-	-	-	-	-	-	-	28.1
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	-	-	-	-	-	-	-	-	99.9
Quality	-	-	-	-	-	-	-	-	-	108.7
Preferred	-	-	-	-	-	-	-	-	-	100.5
Memorable	-	-	-	-	-	-	-	-	-	96.2
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	-	-	-	-	-	-	-	-	-	-
#/Acre	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (any crappie)	-	-	-	-	-	-	-	-	-	1.15
Harvest Rate, num./hr (any crappie)	-	-	-	-	-	-	-	-	-	0.69
% Released (white crappie)	-	-	-	-	-	-	-	-	-	47.6%
Mean Weight (weight crappie)	-	-	-	-	-	-	-	-	-	0.91
<b>Value of Fishery</b> (Trip expenditures - creel)										
All Crappie	-	-	-	-	-	-	-	-	-	\$27,610

\*- Targetted crappie sample



**Black Crappie, Great Falls Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014*
<b>Recruitment</b> (electrofishing)										
Substock CPUE	-	-	-	-	-	-	-	-	-	-
<b>Density</b> (electrofishing)										
PSD	-	-	-	-	-	-	-	-	-	-
RSD (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (total)	-	-	-	-	-	-	-	-	1.0	4.1
CPUE ≥ Stock	-	-	-	-	-	-	-	-	-	-
CPUE ≥ MLL (10-inches)	-	-	-	-	-	-	-	-	-	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	-	-	-	-	-	-	26,880	22,800	23,328	-
#/Acre	-	-	-	-	-	-	14.7	12.5	12.7	-
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (any crapi	-	-	-	-	-	-	-	-	-	1.15
Harvest Rate, num./hr (any cra	-	-	-	-	-	-	-	-	-	0.69
% Released (black crappie)	-	-	-	-	-	-	-	-	-	37.5%
Mean Weight (black crappie)	-	-	-	-	-	-	-	-	-	1.01
<b>Value of Fishery</b> (Trip expenditures - creel)										
All Crappie	-	-	-	-	-	-	-	-	-	\$27,610

\*-Targetted crappie sample.

**Catfish, Great Falls Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all catfish)	-	-	-	-	-	-	-	-	-	1,536
Angler Hours/Acre	-	-	-	-	-	-	-	-	-	0.73
<b>Fishing Success</b> (creel)										
Catch Rate (any catfish)	-	-	-	-	-	-	-	-	-	0.04
Harvest Rate (any catfish)	-	-	-	-	-	-	-	-	-	0.04
% Released (channel)	-	-	-	-	-	-	-	-	-	0.0%
Mean Weight (channel)	-	-	-	-	-	-	-	-	-	4.17
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Catfish	-	-	-	-	-	-	-	-	-	\$1,690

**Bluegill & other sunfish, Great Falls Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
CPUE (mid-summer seine)	14.0	5.0	9.0	2.5	3.5	16.5	5.5	8.0	32.5	21.0
<b>Angling Pressure</b> (creel)										
Angler Hours (all sunfish)	-	-	-	-	-	-	-	-	-	2,890
Angler Hours/Acre	-	-	-	-	-	-	-	-	-	1.4
<b>Fishing Success</b> (creel)										
Catch Rate (any sunfish)	-	-	-	-	-	-	-	-	-	1.76
Harvest Rate (any sunfish)	-	-	-	-	-	-	-	-	-	1.00
% Released (bluegill)	-	-	-	-	-	-	-	-	-	38.1%
Mean Weight (bluegill)	-	-	-	-	-	-	-	-	-	0.34
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Sunfish	-	-	-	-	-	-	-	-	-	\$6,160

**Muskie, Great Falls Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Stocking</b>										
#	-	-	500	45	-	-	-	-	-	-
#/Acre	-	-	0.2	0.0	-	-	-	-	-	-

\*These fish were stocked per request by the Region 3 Streams Crew.

**Walleye, Great Falls Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (gill netting)										
Substock CPUE	-	-	-	-	-	-	-	-	-	-
<b>Density</b> (gill netting)										
PSD	-	-	-	-	-	-	-	-	-	-
RSD (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (total)	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ Stock	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ MLL (15-inches)	-	-	-	-	-	-	-	-	-	-
<b>Growth</b> (gill netting)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (gill netting)										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality</b> (gill netting)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	44,463	-	-	-	-	-	-	-	-	-
#/Acre	21.1	-	-	-	-	-	-	-	-	-

**Shad, Great Falls Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Density</b> (electrofishing)											
Alewife CPUE	-	-	-	-	-	-	-	-	-	-	-
Gizzard CPUE	-	-	27.0	-	96.9	-	-	-	-	-	62.0
Threadfin CPUE	-	-	4.3	-	53.8	-	-	-	-	-	29.1

**Habitat Enhancement, Great Falls Reservoir**

Type of Work	Details	Quantity	
		New	Renovated
none	none	none	none

**Water Quality Monitoring, Great Falls Reservoir**

Parameter	Sampling Period	Water Quality
Temperature	none performed	none performed
Dissolved Oxygen		
PH		
Conductivity		

**Guntersville Reservoir, TN Section (2014 Annual Report)****Description**

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**Area (acres):** 67,900 (~2,500 acres in TN)**Mean Depth (feet):** 15**Shoreline (miles):** 949**Counties:** Marion County, TN, Marshall and Jackson in Alabama**Total Fishing Effort (angler hours):** N/A**Total Value by Anglers:** N/A**Summary:**

Due to the riverine type environment displayed below Nickajack Dam (Guntersville headwaters), largemouth bass do not typically inhabit this for spawning purposes. This is further proven by our mid-summer seining surveys that have shown very low recruitment in this section of the reservoir over the past ten years. However, anglers fishing for largemouth bass in this section should experience good success however due to the abundance of forage (shad) typically present in this area. Electrofishing surveys conducted here in 2010 & 2012 showed fair catch rates for largemouth bass. Another black bass electrofishing survey will be conducted in the fall of 2015.

This particular tailwater is not expected to be a major destination for smallmouth bass fishing at the current time. Currently there is a one fish/18 inch minimum length limit on smallmouth bass in the TN section of Guntersville Reservoir as well as up the TN River to Watts Bar Dam.

Based on recent surveys, fair success is expected for anglers in pursuit of spotted bass. The habitat in this section of Guntersville Reservoir should be conducive to favorable spotted bass populations. Overall catch rates per electrofishing samples in 2012 displayed an increase from that conducted in 2010. Spotted bass populations in neighboring TN reservoirs in Region 3 have been experiencing downward trends in population abundance according to spring electrofishing surveys and angler surveys. This may very well hold true for this section of Guntersville as well.

Guntersville (TN section) crappie regulations are reflective of the reservoir wide Alabama regulation of 30 fish/day at a minimum length limit of 9 inches. In contrast, other reservoirs in Region 3 have a 10 inch minimum length limit at 15 crappie/day creel limit. Since such a small section of Guntersville is in TN, there are no recommendations for crappie management in this section of Guntersville Reservoir.

As with most of the TN River, bluegill fishing remains stable and the same is expected in this section of Guntersville Reservoir. The Sequatchie River enters the TN River in this area and presumably offers good sunfish fishing opportunities based on preferred habitat available up in the Sequatchie River which is navigable by boat.

Variable reports of sauger fishing success are heard on a yearly basis. It is assumed that a limited sauger fishery will exist in this section of Guntersville Reservoir. Currently, there are no angler surveys to evaluate fishing pressure or success here.

Where creel surveys are conducted on tailwater areas on the TN River in Region 3 (Ft. Loudon, Watts Bar and Chickamauga), catfish populations remain consistent as does fishing success. Due to the similarities in habitat and water quality at Nickajack tailwaters (Guntersville headwaters) compared to other noted TN tailwaters, the same expectations for catfishing success should be realized.

Reports of successful striped bass fishing trips are not that uncommon for anglers fishing the headwaters of Guntersville. Ample forage of shad and striped bass moving in this area through dam passage will

probably keep a consistent fishery present here but probably on a very limited basis since the majority of contribution of striped bass would be dependent on stocking.

Based upon the fact that only approximately 2,500 acres of the 67,900 acres that make up Guntersville Reservoir are located in Tennessee, there are no management recommendations at this time for most gamefish. However, it is recommended that data collection surveys continue to be conducted as deemed necessary to survey the fish populations. Additionally creel info would be helpful in evaluating angling pressure, target species and fishing success, etc. in this section of Guntersville.

#### Largemouth Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (electrofishing)						2.00		2.00		-
CPUE (mid-summer seine)	1.00	2.50	1.00	0.00	0.00	0.00	1.00	3.50	1.00	3.00
<b>Density (electrofishing)</b>										
PSD	-	-	-	-	-	87	-	67	-	-
RSD (preferred)	-	-	-	-	-	47.0	-	36.0	-	-
CPUE (total)	-	-	-	-	-	17.2	-	16.4	-	-
CPUE $\geq$ Stock	-	-	-	-	-	15.2	-	14.4	-	-
CPUE $\geq$ MLL (15-inches)	-	-	-	-	-	7.2	-	5.2	-	-
<b>Growth (electrofishing)</b>										
Length Age-1										-
Length Age-3										-
<b>Condition (spring electrofishing)</b>										
Stock						92.3		96.2		-
Quality						96.5		94.8		-
Preferred						96.0		94.3		-
Memorable						-		98.2		-

**Smallmouth Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (electrofishing)										-
CPUE (mid-summer seine)	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.50	3.00
<b>Density (electrofishing)</b>										
PSD										-
RSD (preferred)										-
CPUE (preferred)										-
CPUE (total)						0.4		2.8		-
CPUE > Stock										-
CPUE > Preferred										-
CPUE > MLL (18-inches)										-
<b>Growth (electrofishing)</b>										
Length Age-1										-
Length Age-3										-
<b>Condition (spring electrofishing)</b>										
Stock										-
Quality										-
Preferred										-
Memorable										-

**Spotted Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (electrofishing)								4.80		-
CPUE (mid-summer seine)	2.00	0.00	1.50	0.00	0.00	0.00	0.50	1.50	1.00	0.00
<b>Density (electrofishing)</b>										
PSD								47		-
RSD (preferred)								23		-
CPUE (total)						6.8		16.8		-
CPUE $\geq$ Stock								12.0		-
<b>Growth (electrofishing)</b>										
Length Age-1										-
Length Age-3										-
<b>Condition (spring electrofishing)</b>										
Stock								96.9		-
Quality								92.6		-
Preferred								100.1		-



Sauger

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (gill netting)										
Substock CPUE			0.10						-	-
<b>Density</b> (gill netting)										
PSD			100						-	-
RSD (preferred)			8						-	-
CPUE (total)			2.1						-	-
CPUE $\geq$ Stock			2.0						-	-
CPUE $\geq$ MLL (15-inches)			0.2						-	-
<b>Growth</b> (gill netting)										
Length Age-1									-	-
Length Age-3									-	-
<b>Condition</b> (gill netting)										
Stock			-						-	-
Quality			95.6						-	-
Preferred			103.9						-	-
Memorable			-						-	-
<b>Mortality</b> (gill netting)										
Total Mortality									-	-

**Nickajack Reservoir (2014 Annual Report)****Description**

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**Area (acres):** 10,370**Mean Depth (feet):****Shoreline (miles):** 179**Counties:** Hamilton and Marion**Summary:**

Spring black bass electrofishing surveys were conducted in Nickajack in 2014. These are typically conducted every other year on this reservoir.

Bi-annual spring electrofishing surveys have shown decreasing numbers of substock largemouth bass in our surveys as compared to high counts in the years 2002 and 2004. Overall CPUE for largemouth bass in the 2014 (66.3 lmb/hour) spring electrofishing surveys is also the lowest in the past ten years. Historically, Nickajack Reservoir has been categorized by high catch rates for LMB when compared to other Tennessee Reservoirs. A variety of suitable habitat (rocky shoreline, humps, woody debris) and sustained aquatic vegetation (most notably on the lower end of the reservoir) has provided an environment favorable to largemouth bass as well as other fish species. Although, slight concerns exist regarding perceived low recruitment, good fishing success for largemouth bass is expected in Nickajack Reservoir at the current time. Currently there is a 15 inch minimum size limit for largemouth bass on Nickajack Reservoir with a creel limit of 5 (statewide regulation).

In the spring black bass electrofishing surveys, smallmouth bass never appear in abundance in the lower end of the reservoir if at all. However, near the headwaters (Chickamauga tailwaters) of Nickajack Reservoir, several smallmouth bass are caught with some being of the trophy status. This riverine environment with rocky habitat and ample amounts of forage, have proven to be conducive to a good and sustainable smallmouth bass fishery there. Excellent fishing opportunities exist in this section of the reservoir at peak times of the year. The Region 3 Reservoir crew specifically conducts data surveys in this described area to better evaluate the smallmouth bass fishery in Nickajack and other pertinent species.

According to our bi-annual electrofishing surveys on Nickajack Reservoir, spotted bass numbers have declined especially on the lower end of the reservoir when compared to the last ten years of data. This is also true for other reservoirs on the TN River within Region 3. For example, overall CPUE from the electrofishing surveys have went from a high of 34 fish/hour in the year 2002 to a low representation of 4 fish/hour in 2010, 1 fish/hour in 2012 and zero in 2014! There are no obvious reasons for this steady decrease over the past decade and beyond. However, water flows and shifts in preferred and available habitat may have warranted some overall movements and locations of spotted bass. Electrofishing surveys are also conducted at the Nickajack headwaters (Chickamauga tailwaters) where a fair presence of spotted bass still exists. One targeting spotted bass for angling opportunities should concentrate in this area in the upper section of the reservoir. Currently there is a more liberal 15 spotted bass/day creel limit, no minimum length limit in a specified area on the upper end of Nickajack Reservoir (Chickamauga Dam downstream to mouth of South Chickamauga Creek). This regulation was originally proposed by smallmouth bass anglers in this area who felt that the dominance spotted bass were displacing smallmouth bass abundance there.

A consistent crappie population continues to exist in Nickajack Reservoir. The best suitable habitat for crappie is found towards the lower end of the reservoir where the water is more sluggish and more woody debris habitat can be found. The typical murky color associated with Nickajack Reservoir would also tend to favor that of white crappie in comparison to black crappie. Fair to good fishing for crappie is expected.

According to the last roving creel surveys conducted in 2012 on Nickajack, the catch rate by anglers in pursuit of crappie on Nickajack was very good at 4.21 crappie/hour.

The redear sunfish population in Nickajack continues to provide great opportunities for anglers. An electrofishing survey in 2010 showed a good population of redear distributed from the 4 to 10 inch range. The bulk of the sample was in the 7 to 9 inch frequency. Several areas of suitable spawning habitat and desired food coexist in the reservoir yielding to successful year classes of redear sunfish. According to a roving creel survey conducted in 2011 the average catch rate for redear/bluegill (sunfish) was 5 fish per hour but down in 2012 to 2.18 fish/hour. Redear presence in the 2014 mid-summer seining surveys were low at 0.30 redear/seine haul however fall trapnetting conducted in 2014 realized a catch rate of 134.5 redear/net night. Continued excellent opportunities should exist with those anglers in pursuit of redear sunfish.

There is an excellent population of bluegill in Nickajack Reservoir. Mid-summer seining surveys are usually dominated by the presence of bluegill. However, in the mid-summer seining samples conducted in 2014 bluegill catch rates were at a decade low at 1.30 bluegill/seine haul but still higher than redear for this same survey. Fall trapnetting surveys conducted in 2014 targeting crappie showed a bluegill presence of 22.75 bluegill/net night which is a much lower representation than that of redear from the same collection. Angler pursuit and success for bluegill here are expected to remain consistent. Multiple areas of bluegill habitat exist in Nickajack Reservoir, reservoir wide.

Sauger are not stocked in Nickajack Reservoir at the current time. Sauger do exist in Nickajack and it is also known that sauger migrate via dam passage between reservoirs. Neighboring Chickamauga Reservoir (upstream) has received sauger stockings in the past. Available hatchery space is the biggest limitation for including Nickajack Reservoir with annual stockings of sauger. Without a consistent creel survey, it is hard to determine current angling success rate with sauger anglers. Due to the necessity of sustaining sauger populations being augmented with annual stockings, fishing success in Nickajack Reservoir would be predicted to be limited. Reports of walleye catches are becoming more common on the upper reaches of Nickajack most likely influenced by walleye stockings in neighboring Chickamauga Reservoir. Perhaps walleye stockings in Nickajack would be a better alternative to sauger. More validity will be given to this concept as other walleye stocking projects are evaluated in other mainstem (TN River) reservoirs in Region 3 that are currently being stocked with walleye (i.e. Watts Bar and Chickamauga).

Although there is not much data to evaluate the catfish fishery within Nickajack Reservoir, fishing reports are consistent in reference to the success of this fishery. Several guides and anglers can be observed in pursuit of catfish on Nickajack Reservoir. Blue, channel, and flathead catfish all call Nickajack Reservoir home. As with other Tennessee Reservoirs in this region of the state, fishing success for catfish and angler pursuit is expected to remain favorable. In 2012, catfish anglers expended an estimated \$74,190 in pursuit of these fish while experiencing an average catch rate of 1.40 catfish/hour.

A striped bass fishery exists in Nickajack Reservoir despite the fact that they are not stocked here. Migration of striped bass through dams from reservoirs that have striped bass stocking programs can explain this existence. Also possibly a limited amount of natural reproduction may occur during years with appropriate flow within Nickajack's long riverine habitat. Ample forage bases of shad and skipjack, especially in the headwater section, help nourish and sustain any presence of striped bass. Success in regards to angling for striped bass can be achieved in Nickajack Reservoir but should not be as productive as stocked reservoirs such as Watts Bar and to a more limited amount Chickamauga, which are both upstream from Nickajack Reservoir.

The management recommendation for the shad population is to monitor forage base in conjunction with bi-annual spring black bass electrofishing surveys as deemed necessary.

#### Lakewide Creel Results

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours							256,341			
Angler Hours Per Acre							24.72			
Angler Trips							44,704			
<b>Value of Fishery (angler expenditures creel)</b>										
All Species							\$970,820			

**Black Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
All Black Bass (hrs)	-	-	-	-	-	-	119,971	71,948	-	-
(hrs/acre)	-	-	-	-	-	-	11.57	6.94	-	-
Any Black Bass (hrs)	-	-	-	-	-	-	117,844	71,948	-	-
(hrs/acre)	-	-	-	-	-	-	11.36	6.94	-	-
Largemouth Bass (hrs)	-	-	-	-	-	-	2,127	-	-	-
(hrs/acre)	-	-	-	-	-	-	0.21	-	-	-
Smallmouth Bass (hrs)	-	-	-	-	-	-	-	-	-	-
(hrs/acre)	-	-	-	-	-	-	-	-	-	-
Spotted Bass (hrs)	-	-	-	-	-	-	-	-	-	-
(hrs/acre)	-	-	-	-	-	-	-	-	-	-
<b>Tournaments (all black bass)</b>										
# Tournaments (BITE)	4	-	1	-	-	-	-	-	-	-
Pounds/Angler Day (BITE)	2.9	-	4.1	-	-	-	-	-	-	-
Bass/Angler Day (BITE)	1.5	-	2.6	-	-	-	-	-	-	-
Tournament Angler Hrs/Acre (creel)	-	-	-	-	-	-	-	-	-	-
Tournament Catch Rate (creel)	-	-	-	-	-	-	0.86	0.60	-	-
Non-Tournament Catch Rate (creel)	-	-	-	-	-	-	0.79	0.92	-	-
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	-	-	-	-	-	-	\$1,146,810	\$208,660	-	-
Any Black Bass	-	-	-	-	-	-	\$1,143,160	\$208,660	-	-
Largemouth Bass	-	-	-	-	-	-	\$3,650	-	-	-
Smallmouth Bass	-	-	-	-	-	-	-	-	-	-
Spotted Bass	-	-	-	-	-	-	-	-	-	-

**Largemouth Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	-	8.00	-	9.30	-	-	-	8.50	-	0.67
CPUE (mid-summer seine)	1.00	1.30	3.00	2.80	1.30	2.30	1.50	0.80	3.30	2.80
<b>Density</b> (spring electrofishing)										
PSD (quality)	-	71.0	-	82.0	-	93.0	-	81.0	-	75.0
RSD (preferred)	-	22.0	-	36.0	-	30.0	-	50.0	-	39.0
CPUE (total)	-	74.6	-	106.3	-	119.0	-	78.8	-	66.3
CPUE $\geq$ Stock	-	73.3	-	97.0	-	108.0	-	70.3	-	48.7
CPUE $\geq$ MLL (15-inches)	-	15.3	-	-	-	32.3	-	35.3	-	15.4
<b>Growth</b> (spring electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	-	91.2	-	98.5	-	91.2	-	94.6	-	91.7
Quality	-	86.7	-	95.0	-	89.6	-	94.9	-	85.4
Preferred	-	88.0	-	93.1	-	85.9	-	93.9	-	88.3
Memorable	-	92.6	-	93.5	-	-	-	94.0	-	112.7
<b>Mortality</b> (spring electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (intended)	-	-	-	-	-	-	0.81	-	-	-
Catch Rate, num./hr (any black bass)	-	-	-	-	-	-	0.89	0.94	-	-
Harvest Rate, num./hr (any black bass)	-	-	-	-	-	-	0.07	0.02	-	-
% Released	-	-	-	-	-	-	90.4%	97.1%	-	-
Mean Weight	-	-	-	-	-	-	2.63	2.95	-	-

**Smallmouth Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	-	-	-	-	-	-	-	-	-	-
CPUE (mid-summer seine)	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.30	-
<b>Density</b> (spring electrofishing)										
PSD	-	-	-	-	-	-	-	-	-	-
RSD (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (total)	-	-	-	-	-	-	-	0.3	-	-
CPUE $\geq$ Stock	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ Preferred	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ MLL (18-inches)	-	-	-	-	-	-	-	-	-	-
<b>Growth</b> (spring electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality</b> (spring electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (intended)	-	-	-	-	-	-	0.13	-	-	-
Catch Rate, num./hr (any black ba	-	-	-	-	-	-	0.89	0.94	-	-
Harvest Rate, num./hr (any black l	-	-	-	-	-	-	0.07	0.02	-	-
% Released	-	-	-	-	-	-	98.0%	96.0%	-	-
Mean Weight	-	-	-	-	-	-	4.68	3.94	-	-

**Spotted Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	-	0.00	-	0.30	-	-	-	-	-	-
CPUE (mid-summer seine)	2.30	9.50	3.80	1.50	0.00	3.30	2.30	2.50	6.50	-
<b>Density</b> (spring electrofishing)										
PSD	-	40	-	50	-	-	-	-	-	-
RSD (preferred)	-	60	-	9	-	-	-	-	-	-
CPUE (total)	-	14.5	-	7.7	-	4.0	-	1.0	-	-
CPUE $\geq$ Stock	-	5.0	-	7.4	-	-	-	-	-	-
<b>Growth</b> (spring electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	-	90.3	-	94.1	-	-	-	-	-	-
Quality	-	85.4	-	89.1	-	-	-	-	-	-
Preferred	-	-	-	76.7	-	-	-	-	-	-
<b>Mortality</b> (spring electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (intended)	-	-	-	-	-	-	0.21	-	-	-
Catch Rate, num./hr (any black bass)	-	-	-	-	-	-	0.89	0.94	-	-
Harvest Rate, num./hr (any black bass)	-	-	-	-	-	-	0.07	0.02	-	-
% Released	-	-	-	-	-	-	96.9%	99.2%	-	-
Mean Weight	-	-	-	-	-	-	2.05	1.57	-	-



**Black Crappie**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (fall trapnetting)										
Substock CPUE	-	-	-	-	-	-	-	-	-	1.60
<b>Density</b> (electrofishing)										
PSD	-	-	-	-	-	-	-	-	-	-
RSD (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (total)	-	-	-	-	-	-	-	0.5	-	-
CPUE > Stock	-	-	-	-	-	-	-	-	-	-
CPUE > MLL (10-inches)	-	-	-	-	-	-	-	-	-	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	-	-	-	-	-	-	11,300	4,054	-	-
Angler Hours/Acre	-	-	-	-	-	-	1.09	0.39	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	-	-	-	-	-	-	2.08	4.21	-	-
Harvest Rate (any crappie)	-	-	-	-	-	-	0.73	1.12	-	-
% Released (black crappie)	-	-	-	-	-	-	63.0%	71.4%	-	-
Mean Weight (black crappie)	-	-	-	-	-	-	0.83	0.80	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	-	-	-	-	-	-	\$106,910	\$12,740	-	-

White Crappie

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (fall trapnetting)										
Substock CPUE	-	-	-	-	-	-	-	-	-	1.53
<b>Density</b> (electrofishing)										
PSD	-	-	-	-	-	-	-	-	-	-
RSD (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (total)	-	-	-	-	-	-	-	0.5	-	-
CPUE $\geq$ Stock	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ MLL (10-inches)	-	-	-	-	-	-	-	-	-	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	-	-	-	-	-	-	11,300	4,054	-	-
Angler Hours/Acre	-	-	-	-	-	-	1.09	0.39	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	-	-	-	-	-	-	2.08	4.21	-	-
Harvest Rate (any crappie)	-	-	-	-	-	-	0.73	1.12	-	-
% Released (black crappie)	-	-	-	-	-	-	89.9%	78.6%	-	-
Mean Weight (black crappie)	-	-	-	-	-	-	0.92	0.79	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	-	-	-	-	-	-	\$106,910	\$12,740	-	-

**Striped Bass\***

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (gill netting)										
Substock CPUE	-	-	-	-	-	-	-	-	-	-
<b>Density</b> (gill netting)										
PSD	-	-	-	-	-	-	-	-	-	-
RSD (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (total)	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ Stock	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ 15-inches	-	-	-	-	-	-	-	-	-	-
<b>Growth</b> (gill netting)										
Length Age-2	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (gill netting)										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality</b> (gill netting)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	-	-	-	-	-	-	-	-	-	-
#/Acre	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours	-	-	-	-	-	-	-	75	-	-
Angler Hours/Acre	-	-	-	-	-	-	-	0.01	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	-	-	-	-	-	-	-	0.00	-	-
Harvest Rate (intended)	-	-	-	-	-	-	-	0.00	-	-
% Released	-	-	-	-	-	-	-	98.3%	-	-
Mean Weight	-	-	-	-	-	-	-	16.70	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Striped Bass	-	-	-	-	-	-	-	-	-	-

**Bluegill**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (electrofishing)	-	-	-	-	-	-	-	-	-	-
CPUE (mid-summer seine)	7.80	59.50	2.50	28.00	25.30	12.80	12.00	7.50	10.80	1.30
Substock CPUE (fall trapnetting)										22.75
<b>Density</b> (electrofishing)										
PSD	-	-	-	-	-	-	-	-	-	-
RSD (preferred)	-	-	-	-	-	-	-	-	-	-
CPUE (total)	-	-	-	-	-	-	-	-	-	-
CPUE $\geq$ Stock	-	-	-	-	-	-	-	-	-	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	-	-	-	-	-	-	-	-	-	-
Preferred	-	-	-	-	-	-	-	-	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all sunfish)	-	-	-	-	-	-	1,141	827	-	-
Angler Hours/Acre	-	-	-	-	-	-	0.11	0.08	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (any sunfish)	-	-	-	-	-	-	5.00	2.18	-	-
Harvest Rate (any sunfish)	-	-	-	-	-	-	0.00	1.54	-	-
% Released (bluegill)	-	-	-	-	-	-	71.1%	53.6%	-	-
Mean Weight (bluegill)	-	-	-	-	-	-	0.28	0.34	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Sunfish	-	-	-	-	-	-	\$13,290	\$820	-	-

**Redear**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (electrofishing)	-	-	-	-	-	0.00	-	1.00	-	-
CPUE (mid-summer seine)	0.00	0.00	0.00	6.30	2.30	0.30	0.00	0.00	4.00	0.30
Substock CPUE (fall trapnetting)										134.5
<b>Density (electrofishing)</b>										
PSD	-	-	-	-	-	72	-	29.0	-	87.0
RSD (preferred)	-	-	-	-	-	24.0	-	1.0	-	21.0
CPUE (total)	-	-	-	-	-	70.7	-	22.0	-	42.7
CPUE $\geq$ Stock	-	-	-	-	-	70.7	-	21.0	-	17.8
<b>Growth (electrofishing)</b>										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition (spring electrofishing)</b>										
Stock	-	-	-	-	-	91.8	-	-	-	103.0
Quality	-	-	-	-	-	94.4	-	-	-	105.7
Preferred	-	-	-	-	-	99.6	-	-	-	101.8
Memorable	-	-	-	-	-	-	-	-	-	104.8
<b>Mortality (electrofishing)</b>										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure (creel)</b>										
Angler Hours (all sunfish)	-	-	-	-	-	-	1,141	827	-	-
Angler Hours/Acre	-	-	-	-	-	-	0.11	0.08	-	-
<b>Fishing Success (creel)</b>										
Catch Rate (any sunfish)	-	-	-	-	-	-	5.00	2.18	-	-
Harvest Rate (any sunfish)	-	-	-	-	-	-	0.00	1.54	-	-
% Released (redeer)	-	-	-	-	-	-	46.3%	45.4%	-	-
Mean Weight (redeer)	-	-	-	-	-	-	0.47	0.39	-	-
<b>Value of Fishery (Trip Expenditures - creel)</b>										
All Sunfish	-	-	-	-	-	-	\$13,290	\$820	-	-

**Catfish**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all catfish)	-	-	-	-	-	-	26,946	28,096	-	-
Angler Hours/Acre	-	-	-	-	-	-	2.60	2.71	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (any catfish)	-	-	-	-	-	-	1.09	1.40	-	-
Harvest Rate (any catfish)	-	-	-	-	-	-	0.59	0.65	-	-
% Released (channel)	-	-	-	-	-	-	61.5%	61.6%	-	-
Mean Weight (channel)	-	-	-	-	-	-	2.43	2.93	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Catfish	-	-	-	-	-	-	\$248,560	\$74,190	-	-

**Shad**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (Spring Electrofishing)										
Alewife CPUE	-	-	-	-	-	-	-	-	-	-
Gizzard CPUE	-	-	-	8.3	-	-	-	-	-	-
Threadfin CPUE	-	-	-	-	-	-	-	-	-	-
Threadfin CPUE (fall trapnetting)										23.90

**Habitat Enhancement - 2014**

Type of Work	Details	Quantity	
		New	Renovated
Installed new brush sites marked with buoys		8	

**Water Quality Monitoring - 2014**

Parameter	Sampling Period	Water Quality
Temperature		
Dissolved Oxygen		
PH		
Conductivity		

**Parksville Reservoir (2014 Annual Report)****Description**

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**Area (acres):** 1,930**Mean Depth (feet):****Shoreline (miles):** 47**Counties:** Polk**Summary:**

No spring electrofishing surveys were conducted on Parksville Reservoir in 2014 to evaluate black bass. These surveys are typically conducted every other year. The last such survey was conducted in the spring of 2013 and is therefore scheduled next for 2015.

Since the realization of Alabama bass in Parksville and the proliferation of this species, the largemouth bass population has decreased according to spring electrofishing surveys. CPUE for substock largemouth bass is currently low also at 3.0 fish/hour in the 2011 spring electrofishing surveys and 3.33 fish/hour in the same 2013 surveys. Recent surveys have shown that species composition in reference to black bass is heavily skewed towards Alabama bass with this species most recently representing over 60% of the black bass composition at Parksville Reservoir. Mid-summer seining surveys have not had a good representation of largemouth bass unlike high numbers of Alabama bass found in the same surveys. Overall CPUE of 33 largemouth bass/hour in the 2013 electrofishing surveys did show a rebound from low numbers from the previous two such surveys.

No representative samples of smallmouth bass have been collected in our data surveys on Parksville Reservoir. Some reports from a few fishermen say they catch smallmouth bass on a rare occasion. There are very low if any expectations for catches of smallmouth bass in Parksville Reservoir.

In 2001, a small representation of "spotted bass" (2 fish) were observed during our bi-annual spring electrofishing surveys on Parksville Reservoir. Since that time, it has been discovered that these are Alabama spotted bass according to genetic tests rather than the native northern strain "Kentucky" spotted bass historically found in TN reservoirs. To date, these Alabama bass have been very prolific within the waters of Parksville. For example, overall CPUE from our electrofishing surveys have increased from a rate of 4.0/hr in 2003 to a rate of 48.7/hr in 2013! According to our mid-summer seining surveys conducted in 2011, the catch rates were at 11 fish per seine site and in 2014 this same survey yielded 10 Alabama bass/seine haul, much higher than the numbers for largemouth bass. These numbers are very reflective of positive spawning results for Alabama bass in Parksville. The temporary "spotted bass" state record for TN weighing 5 lb. 14 oz in 2008 was caught in Parksville Reservoir. This fish was confirmed by genetic tests to be an Alabama bass. Since this record two new record Alabama bass have been caught. The first below Parksville Dam (Ocoee River) in 2010 weighing 6 lbs. 07 oz. Currently the Alabama bass record is once again from within Parksville Reservoir weighing 7 pounds even caught on March 10, 2014. This species of fish continues to expand within this reservoir and beyond. Historically, this reservoir's limiting factors for largemouth bass were low forage bases, poor water quality and low presence of habitat. Currently, aquatic vegetation is present on the upper end of the reservoir and blue back herring have also been documented in the reservoir by the U.S. Forest Service and also by efforts to the Region 3 Reservoir Crew. So not only are Alabama bass expanding but apparently so are other contributing factors to propel this population of non-native fish.

Parksville Reservoir does not rival other reservoirs in close proximity geographically in regards to crappie fishing success. Also, because of the clearness of this reservoir, it is better suited for black crappie rather

than white crappie. Fishing for crappie on Parksville Reservoir will provide mixed success according to electrofishing and recent creel surveys. No consistency with high catch rates is expected. Black and blacknose crappie have been stocked in Parksville in 2013 and 2014 in hopes of boasting the crappie fishing there and possibly creating a hatchery brood source for blacknose crappie. Future evaluations will reveal the success of this project. According to the roving creel survey in 2013 anglers caught crappie at a rate of 1.30 fish/hour.

A few redear sunfish have been stocked collectively with bluegill in Parksville Reservoir. Redear sunfish were first stocked into Parksville in the year 2007 in hopes of supplying a forage base while also offering increased angling opportunities. Time will tell how prolific they are in this reservoir. Limited fishing success is expected at the current time. Some reports of some nice size fish have been received. The 2013 creel report showed little effort and success in regards to overall panfishing in Parksville.

Bluegill have a long presence in Parksville Reservoir. Additionally, they were stocked in 2007 in conjunction with redear sunfish to help promote and sustain a forage base for gamefish there. According to limited fishing reports, anglers enjoy some good success of bluegill angling here during peak opportunistic times. Fair success should be expected at the current time. Sunfish (bluegill, redear) were caught at a rate of 2 fish/hour according to creel surveys conducted on Parksville in 2013. Bluegill abundance remains consistent in the mid-summer seining surveys which should be a reflection of year to year spawning success.

Shad populations in Parksville Reservoir are limited at best. During the bi-annual spring electrofishing surveys, some large adult gizzard shad were observed. However, rarely if ever do we observe the schools of young shad that would offer promise of a sustainable forage base. A large die off of blueback herring during the winter was observed by the public a few years ago. It is thought that these blue back have been illegally introduced as bait or intentions of providing forage for the illegally introduced Alabama bass. In April of 2014, a total of 5 gill nets were set in Parksville in search of blueback herring. Five blueback herring were caught in these surveys, confirming once again their presence in Parksville Reservoir.



**Lakewide Creel Results**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	-	-	-	-	-	-	-	-	44,156	-
Angler Hours Per Acre	-	-	-	-	-	-	-	-	23.36	-
Angler Trips	-	-	-	-	-	-	-	-	7,029	-
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	-	-	-	-	-	-	-	-	\$99,940	-

**Black Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
All Black Bass (hrs)	-	-	-	-	-	-	-	-	-	-
(hrs/acre)	-	-	-	-	-	-	-	-	-	-
Any Black Bass (hrs)	-	-	-	-	-	-	-	-	36,771	-
(hrs/acre)	-	-	-	-	-	-	-	-	19.45	-
Largemouth Bass (hrs)	-	-	-	-	-	-	-	-	-	-
(hrs/acre)	-	-	-	-	-	-	-	-	-	-
Smallmouth Bass (hrs)	-	-	-	-	-	-	-	-	-	-
(hrs/acre)	-	-	-	-	-	-	-	-	-	-
Alabama Bass (hrs)	-	-	-	-	-	-	-	-	-	-
(hrs/acre)	-	-	-	-	-	-	-	-	-	-
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	-	-	-	-	-	-	-	-	-	-
Any Black Bass	-	-	-	-	-	-	-	-	\$87,520	-
Largemouth Bass	-	-	-	-	-	-	-	-	-	-
Smallmouth Bass	-	-	-	-	-	-	-	-	-	-
Alabama Bass	-	-	-	-	-	-	-	-	-	-

**Largemouth Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	4.00	-	7.00	-	0.66	-	3.00	-	3.33	-
CPUE (mid-summer seine)	0.50	1.00	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00
<b>Density</b> (spring electrofishing)										
PSD	83	-	-	-	47	-	77	-	62.5	-
RSD (preferred)	48.0	-	8.0	-	22.0	-	45.0	-	26.0	-
CPUE (total)	47.0	-	21.0	-	17.3	-	18.7	-	33.0	-
CPUE $\geq$ Stock	46.5	-	21.0	-	16.7	-	15.7	-	29.3	-
CPUE $\geq$ MLL (15-inches)	-	-	9.7	-	7.3	-	7.0	-	7.7	-
<b>Growth</b> (spring electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	88.1	-	83.2	-	89.7	-	91.4	-	86.5	-
Quality	91.7	-	84.5	-	81.5	-	85.8	-	84.5	-
Preferred	93.1	-	83.3	-	81.2	-	83.0	-	89.0	-
Memorable	-	-	81.5	-	83.4	-	91.0	-	80.9	-
<b>Mortality</b> (spring electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (intended)	-	-	-	-	-	-	-	-	-	-
Catch Rate, num.hr (any black bass)	-	-	-	-	-	-	-	-	1.09	-
Harvest Rate, num./hr (intended)	-	-	-	-	-	-	-	-	0.19*	-
% Released	-	-	-	-	-	-	-	-	85.2%	-
Mean Weight	-	-	-	-	-	-	-	-	2.36	-

\* Any black bass

**Alabama Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	-	-	7.00	-	5.00	-	6.67	-	3.00	-
CPUE (mid-summer seine)	0.00	0.00	0.00	0.00	1.50	0.00	11.00	2.00	3.00	10.00
<b>Density</b> (spring electrofishing)										
PSD	100	-	-	-	55	-	49	-	62.8	-
RSD (preferred)	-	-	8	-	16	-	12	-	38	-
CPUE (total)	3.3	-	21.3	-	38.3	-	39.3	-	48.7	-
CPUE $\geq$ Stock	1.8	-	21.3	-	33.3	-	32.7	-	45.7	-
<b>Growth</b> (spring electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	87.1	-	83.2	-	79.9	-	79.5	-	84.7	-
Quality	87.1	-	85.8	-	80.7	-	81.2	-	86.9	-
Preferred	-	-	80.5	-	80.3	-	78.1	-	91.2	-
<b>Mortality</b> (spring electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (intended)	-	-	-	-	-	-	-	-	-	-
Catch Rate, num.hr (any black bass)	-	-	-	-	-	-	-	-	1.09	-
Harvest Rate, num./hr (any black bass)	-	-	-	-	-	-	-	-	0.19	-
% Released	-	-	-	-	-	-	-	-	85.8%	-
Mean Weight	-	-	-	-	-	-	-	-	1.35	-

**Black Crappie**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE										
CPUE (midsummer seine)										2.0
<b>Density</b> (electrofishing)										
PSD										
RSD (preferred)										
CPUE (total)							3.3			
CPUE ≥ Stock										
CPUE ≥ MLL (10-inches)										
<b>Growth</b> (electrofishing)										
Length Age-1										
Length Age-3										
<b>Condition</b> (electrofishing)										
Stock										
Quality										
Preferred										
Memorable										
<b>Mortality</b> (electrofishing)										
Total Mortality										
<b>Stocking</b>										
# Black & BNC mix	-	-	-	-	-	-	-	-	23,152	70,990
#/Acre	-	-	-	-	-	-	-	-	12.25	37.56
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	-	-	-	-	-	-	-	-	1,486	-
Angler Hours/Acre	-	-	-	-	-	-	-	-	0.79	-
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	-	-	-	-	-	-	-	-	1.30	-
Harvest Rate (any crappie)	-	-	-	-	-	-	-	-	0.67	-
% Released (black crappie)	-	-	-	-	-	-	-	-	58.1%	-
Mean Weight (black crappie)	-	-	-	-	-	-	-	-	0.80	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	-	-	-	-	-	-	-	-	\$3,560	-

Non-target sample unless otherwise noted.

**White Crappie**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE										
<b>Density</b> (electrofishing)										
PSD										
RSD (preferred)										
CPUE (total)										
CPUE $\geq$ Stock										
CPUE $\geq$ MLL (10-inches)										
<b>Growth</b> (electrofishing)										
Length Age-1										
Length Age-3										
<b>Condition</b> (electrofishing)										
Stock										
Quality										
Preferred										
Memorable										
<b>Mortality</b> (electrofishing)										
Total Mortality										
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	-	-	-	-	-	-	-	-	1,486	-
Angler Hours/Acre	-	-	-	-	-	-	-	-	0.79	-
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	-	-	-	-	-	-	-	-	1.30	-
Harvest Rate (any crappie)	-	-	-	-	-	-	-	-	0.67	-
% Released (w hite crappie)	-	-	-	-	-	-	-	-	59.6%	-
Mean Weight (w hite crappie)	-	-	-	-	-	-	-	-	0.79	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	-	-	-	-	-	-	-	-	\$3,560	-

Non-target sample unless otherwise noted.

**Bluegill**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (electrofishing)							0.33			
CPUE (mid-summer seine)	4.50	13.00	9.00	5.00	4.50	5.00	11.00	14.50	7.00	6.50
<b>Density</b> (electrofishing)										
PSD							56			
RSD (preferred)							6			
CPUE (total)							33.3			
CPUE $\geq$ Stock							33.0			
CPUE $\geq$ Preferred							2.0			
<b>Growth</b> (electrofishing)										
Length Age-1										
Length Age-3										
<b>Condition</b> (electrofishing)										
Stock										
Quality										
Preferred										
Memorable										
<b>Mortality</b> (electrofishing)										
Total Mortality										
<b>Stocking</b>										
#	-	-	127,477	248,966	-	-	102,352	-	-	-
#/Acre	-	-	67.45	131.73	-	-	54.44	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all sunfish)	-	-	-	-	-	-	-	-	90	-
Angler Hours/Acre	-	-	-	-	-	-	-	-	0.05	-
<b>Fishing Success</b> (creel)										
Catch Rate (any sunfish)	-	-	-	-	-	-	-	-	2.00	-
Harvest Rate (any sunfish)	-	-	-	-	-	-	-	-	0.00	-
% Released (bluegill)	-	-	-	-	-	-	-	-	75.7%	-
Mean Weight (bluegill)	-	-	-	-	-	-	-	-	0.26	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Sunfish	-	-	-	-	-	-	-	-	\$0	-

Non-target sample unless otherwise noted.

**Redear**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (electrofishing)										
CPUE (mid-summer seine)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Density</b> (electrofishing)										
PSD										
RSD (preferred)										
CPUE (total)										
CPUE $\geq$ Stock										
CPUE $\geq$ MLL (10-inches)										
<b>Growth</b> (electrofishing)										
Length Age-1										
Length Age-3										
<b>Condition</b> (electrofishing)										
Stock										
Quality										
Preferred										
Memorable										
<b>Mortality</b> (electrofishing)										
Total Mortality										
<b>Stocking</b> (bluegill/redear mix)										
#	-	-	177,276	-	336,396	-	-	-	-	-
#/Acre	-	-	93.80	-	177.99	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all sunfish)	-	-	-	-	-	-	-	-	90	-
Angler Hours/Acre	-	-	-	-	-	-	-	-	0.05	-
<b>Fishing Success</b> (creel)										
Catch Rate (any sunfish)	-	-	-	-	-	-	-	-	2.00	-
Harvest Rate (any sunfish)	-	-	-	-	-	-	-	-	0.00	-
% Released (redear)	-	-	-	-	-	-	-	-	40.2%	-
Mean Weight (redear)	-	-	-	-	-	-	-	-	0.38	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Sunfish	-	-	-	-	-	-	-	-	\$0	-

Non-target sample unless otherwise noted.

**Shad**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (Electrofishing)										
Alewife CPUE										
Gizzard CPUE										
Threadfin CPUE										
Blueback CPUE										0.25*

\*note: 5 nets were sets 4/23/14 to detect the presence of blueback herring. One net was tampered with, and 5 fish were collected in the other four over a 17 hour set.

**Habitat Enhancement - 2014**

Type of Work	Details	Quantity	
		New	Renovated
none performed			

**Water Quality Monitoring - 2014**

Parameter	Sampling Period	Water Quality
Temperature	none performed	
Dissolved Oxygen		
PH		
Conductivity		



### Watts Bar Reservoir (2014 Annual Report)

#### Description

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**Area (acres):** 39,600

**Mean Depth (feet):**

**Shoreline (miles):** 722

**Counties:** Rhea, Meigs, Roane, and Loudon

**Total Fishing Effort (angler hours):** 329,671

**Total Value by Anglers:** \$2,310,020

#### Summary:

Largemouth bass fishing on Watts Bar Reservoir continues to be good overall. The electrofishing surveys conducted in the spring of 2014 show good year class strengths of largemouth bass collected. Spring black bass electrofishing surveys are conducted every other year on Watts Bar. Overall CPUE of 35.8 largemouth bass/hour was slightly lower than the 2012 survey, in which 32.4 lmb/hour were collected. According to an annual roving creel survey on Watts Bar Reservoir, catch rates in 2014 for anglers pursuing largemouth bass were 0.23fish/hour. Mean weights of caught largemouth bass remain very consistent over the past ten years with 2.94 being the mean weight in 2014. The mid-summer seining surveys revealed an elevated catch rate (4.50 fish per seine haul) when compared to last year's CPUE of 4.20 lmb/seine haul. These seine haul surveys hopefully show consistent spawning with the most recent surveys. Although catch rates for substock largemouth bass have been stable and at favorable levels over the past ten years; the absence or minimal presence of aquatic vegetation continues to be a limiting factor as it applies to available habitat in Watts Bar Reservoir. In the late 1980's, Eurasian milfoil had a strong presence in this reservoir, that is contrary to observed establishments today. A total of fifty seven new fish attractor sites were added to Watts Bar Reservoir in 2011. These sites were made available to the public via the regional Facebook site and agency webpage. Prolific forage bases of shad species here have promoted good populations of black bass as well as other fish species. Hopefully, favorable spawning conditions will be realized on a consistent basis allowing for continued sustainable populations of largemouth bass.

Smallmouth bass have been collected in our semi-annual spring electro-fishing surveys and also in targeted night surveys. The smallmouth bass fishery in Watts Bar Reservoir is held in high regards by the fishing public. Since the onset of the 18" minimum size limit, 5 bass/day on smallmouth bass at Watts Bar, the population has responded well with observed increases in abundance of smallmouth bass up to the 18" minimum length limit. High fishing pressure and associated mortality are most likely responsible for the cropping off of smallmouth bass greater than 18" as is evident in length frequency graphs from electrofishing data collections. Originally, TWRA recommended a one or two fish limit but due to public opposition from the tournament angling community, it was raised to five by the TFWC. The targeted samples are usually conducted in early April at night and on rocky banks in the main TN River area on the lower end and mid-section (White's Creek) areas of Watts Bar Reservoir. The overall catch rate for the targeted samples conducted in 2011 was 29.0 smallmouth/hour. Catch rates for smallmouth bass greater than 18" in both electrofishing surveys remain low although some of this may be attributed to limitations of electrofishing. The highest of these catch rates was 3.6 fish/hour observed in a targeted sample in 2009 although the catch rate for 2011 was close at 3.2 fish/hour. Another targeted collection of smallmouth bass from Watts Bar will be taken in the early spring of 2015.

According to our spring electro-fishing surveys over the past ten years on Watts Bar Reservoir, CPUE (fish/hour) for spotted bass have decreased to being non-existent in the spring 2014 black bass electrofishing surveys. Other reservoirs in Region 3 along the TN River are experiencing this same trend with spotted bass according to creel and electrofishing surveys. Of the spotted bass that have been collected in the past, relative weights are satisfactory. Spotted bass in Watts Bar Reservoir have tended to be less numerous and smaller in size than some other region 3 reservoirs like Center Hill and neighboring Chickamauga Reservoir. For these reasons, it is not anticipated that Watts Bar Reservoir will be a high destination for targeted spotted bass fishing and a special watch should be extended towards

monitoring this native fishery in Watts Bar and other mainstem reservoirs along the TN River. A small representation of spotted bass did show up in our mid-summer seining surveys at a CPUE of 1.5 spotted bass/seine haul.

Watts Bar provides a good crappie fishery with opportunities for both white and black crappie. Creel surveys conducted in 2014 show that crappie harvest from Watts Bar are nearly even with black crappie vs. white crappie. According to the fall trapnetting surveys conducted in 2010, white crappie had great spawning success that year. Not since 2003 has a year class this large been realized. Fall trapnetting surveys conducted on Watts Bar in 2014 revealed the second highest catch rate for white crappie within the past ten years at 2.40 white crappie/net night, the year 2010 exhibited 12.4 white crappie/net night. As with some other reservoirs, in Tennessee and out of state, white crappie population numbers have decreased and black crappie have increased, especially in reservoirs where the water clarity has improved which is evidently more conducive to black crappie. In contrast, black crappie representation in the 2014 fall trapnetting surveys was low and this is an ongoing trend of low spawning success evident over the past ten years. Blacknose crappie (BNC) have been stocked in middle (White's Creek) and lower (Piney Creek) embayment in hopes of offsetting poor years of black crappie recruitment in Watts Bar since 2010 with the exception of 2013. An additional motive for stocking these BNC has been to produce adult BNC which can be used for brood fish within the hatchery system at Sugar Creek and Hiwassee fish ponds which are in close proximity to Watts Bar Reservoir. The year 2013 was a productive year for crappie anglers on Watts Bar Reservoir due to the elevated spawning success in 2010. Anglers fishing for crappie in Watts Bar expended an estimated \$331,270 in 2014 according to roving creel surveys. Additionally, creel surveys show that catch rates for crappie at Watts Bar have remained stable over the past ten years with an average catch rate of 1.75 crappie/hour.

When compared to other redear fisheries in other reservoirs in Tennessee, Watts Bar is not a high destination for most redear anglers. According to roving creel surveys, low average catch rates have been realized over the past ten years. Also, redear sunfish have made a minimal presence in our mid-summer seining surveys. Redear sunfish will be caught by anglers in pursuit of bluegill and those who fish some of the few historic redear nesting sites. Otherwise, anglers specifically looking to catch redear will probably engage in a trip to neighboring Chickamauga or Nickajack Reservoirs.

Good bluegill populations provide ample opportunity for angling on Watts Bar Reservoir. Overall the mid-summer seining surveys reflect consistent spawning success for bluegill here although samples taken in 2014 were at a ten year low (2.70 bluegill/seine haul). The average with this data survey is 9.61 fish/seine haul over the past ten years. Expectations for continued viable bluegill populations are predicted for Watts Bar Reservoir. Because bluegill are so prolific in agreeable environments like Watts Bar Reservoir and other neighboring TN River impoundments, there are no current regulations pertaining to size or creel here and at other reservoirs across the state. We will continue to monitor the population through trapnets, mid-summer seines, creel, and electrofishing.

Due to inconsistent and unpredictable sauger spawning success past annual maintenance stockings of sauger were recommended and requested to produce dependable annual year classes of fish. In 2014, sauger anglers expended an estimated \$15,540 in pursuit of sauger according to our annual creel surveys. Most of this fishing takes place in the area of Browder shoals upstream to Ft. Loudon Dam. Due to the difficulty with culturing sauger and the benefits that would be realized by instead stocking walleye; a walleye stocking program was initiated in 2011 (see "Walleye" section). Sauger, which are native to the TN River are expected to still be represented at some level but much lower than that when stocking has been implemented on an annual basis.

A walleye stocking program was implemented at Watts Bar Reservoir in 2011 and walleye fingerlings have been stocked annually in the following years. In 2014, a gillnet survey was conducted on the middle (White's Creek) and lower sections (Piney River) of Watts Bar. Over 100 walleye were collected

representing different year classes and all exhibited good condition factors (Wrs). Anglers have been very supportive and excited regarding this new project which replaces historic sauger stocking regimes at Watts Bar. Reports of anglers starting to catch walleye have been common. As anglers learn the preference areas of the reservoir in association with walleye there should be a reflection of catch rates in creel surveys. This population and project will continue to be evaluated to determine recruitment, growth, mortality and density. Determination of preferred spawning runs by the walleye, if they are established will be beneficial to this evaluation as well. We will continue to request stocking of walleye in Watts Bar annually in different sections of the reservoir (Piney Creek embayment, White's Creek Embayment, Clinch/Emory River, and upper section below Ft. Loudon Dam.

Fishing for catfish utilizing a variety of methods (trotlines, rod & reel, jugs, noodling, etc.) remains popular on Watts Bar Reservoir. Ample numbers of blue, channel, and flathead catfish provide great angling opportunity here. An estimated \$412,880 was spent while pursuing catfish in 2014 according to our roving creel surveys. Catfish harvest from Watts Bar in 2014 was in majority blue catfish with an estimated 93,179 blues taken. Channel catfish was the second most harvested species of catfish at 19,320 estimated harvested, much lower than that of blue catfish. It is predicted that catfish angling here will remain positive in the respects of pursuit and the success thereof as data shows great consistency with angling hours expended in pursuit of catfish at Watts Bar.

Striped bass continues to be a very popular fishery on Watts Bar Reservoir. These fish are stocked annually at an average rate of 6.9 fish/acre (past ten year average) on years stocked. Striped bass have flourished at Watts Bar due to ample dissolved oxygen, thermal refuges, and ample forage bases. Striped bass were first stocked into Watts Bar in 1964 and has been part of a long tradition ever since. It is estimated from the 2014 creel surveys that \$311,090 was expended in 2014 in the pursuit of striped bass. Tailwater areas (below Ft. Loudon Dam) continually tend to be areas of great success by both in state and out of state angler. In 2014 the average weight of creeled striped bass was 10.68 pounds, below the average in the past ten years but most likely reflective of a large year class. Angling effort has remained consistent for anglers in pursuit of striped bass at Watts Bar. Condition factors (Wr) for these striped bass continues to show that they are healthy as well and reflect that ample and abundant forage is available to them such as gizzard and threadfin shad and skipjack herring.

#### Lakewide Creel Results

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	543,581	509,367	442,133	514,776	437,960	471,088	466,016	472,307	383,910	329,671
Angler Hours Per Acre	13.9	13.03	11.31	13.17	11.2	12.05	11.92	12.08	9.82	8.43
Angler Trips	85,180	78,150	69,522	82,544	68,304	72,130	74,241	79,606	65,960	52,290
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	\$1,623,440	\$1,656,490	\$1,600,360	\$2,029,290	\$1,614,740	\$1,702,200	\$1,874,550	\$1,706,080	\$1,054,860	\$1,155,120

**Black Bass**

Angling Pressure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
All Black Bass (hrs)	231,178	231,473	197,176	246,372	204,511	202,084	194,330	195,972	135,026	117,057
(hrs/acre)	5.84	5.85	4.98	6.22	5.16	5.10	4.91	5.01	3.45	2.99
Any Black Bass (hrs)	230,717	230,562	197,176	245,760	204,015	201,792	194,330	195,972	135,026	117,057
(hrs/acre)	5.83	5.82	4.98	6.21	5.15	5.10	4.91	5.01	3.45	2.99
Largemouth Bass (hrs)	461	911	-	251	496	292	-	-	-	1,212
(hrs/acre)	0.01	0.02	-	0.01	-	0.01	-	-	-	0.03
Smallmouth Bass (hrs)	-	-	-	361	-	-	-	-	-	-
(hrs/acre)	-	-	-	0.01	-	-	-	-	-	-
Spotted Bass (hrs)	-	-	-	-	-	-	-	-	-	-
(hrs/acre)	-	-	-	-	-	-	-	-	-	-
<b>Tournaments (all black bass)</b>										
# Tournaments (BITE)	32	-	35	-	-	-	-	-	-	-
Pounds/Angler Day (BITE)	2.3	-	2.8	-	-	-	-	-	-	-
Bass/Angler Day (BITE)	0.9	-	0.9	-	-	-	-	-	-	-
Tournament Angler Hrs/Acre (creel)	-	-	-	-	-	-	-	-	-	-
Tournament Catch Rate (creel)	0.37	0.50	0.34	0.99	1.68	1.31	0.71	1.02	1.05	1.34
Non-Tournament Catch Rate (creel)	0.91	1.00	0.84	0.93	0.95	0.68	0.68	0.76	0.82	0.52
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	\$1,388,450	\$1,435,970	\$1,447,500	\$2,093,030	\$1,908,330	\$1,538,330	\$1,465,590	\$923,890	\$1,003,780	\$842,750
Any Black Bass	\$781,720	\$827,200	\$865,210	\$2,088,570	\$1,902,810	\$1,535,960	\$1,465,590	\$923,890	\$1,003,780	\$842,750
Largemouth Bass	\$5,510	\$2,780	-	\$2,370	\$5,520	\$2,370	-	-	-	\$14,080
Smallmouth Bass	-	-	-	\$2,090	-	-	-	-	-	-
Spotted Bass	-	-	-	-	-	-	-	-	-	-

**Largemouth Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	-	4.20	-	12.60	-	8.40	-	3.00	-	2.29
CPUE (mid-summer seine)	2.30	1.30	5.20	0.10	5.50	2.70	3.70	3.40	4.20	4.50
<b>Density</b> (spring electrofishing)										
PSD (quality)	-	77	-	69	-	70	-	76	-	72
RSD (preferred)	-	48.0	-	32.0	-	21.0	-	53.0	-	34.0
CPUE (total)	-	5.7	-	91.2	-	46.8	-	32.4	-	35.8
CPUE ≥ Stock	-	4.4	-	78.6	-	38.4	-	29.4	-	17.4
CPUE ≥ MLL (15-inches)	-	18.0	-	25.0	-	8.2	-	15.6	-	5.7
<b>Growth</b> (spring electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	-	90.0	-	86.0	-	96.0	-	93.4	-	89.4
Quality	-	96.7	-	91.1	-	90.9	-	93.9	-	91.9
Preferred	-	98.3	-	93.7	-	90.1	-	96.4	-	95.7
Memorable	-	91.9	-	96.8	-	92.3	-	99.5	-	99.8
<b>Mortality</b> (spring electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (intended)	0.00	1.01	N/A	1.75	0.29	0.48	N/A	N/A	0.72	0.23
Catch Rate, num.hr (any black bass)	0.81	1.00	0.88	0.92	1.06	0.75	0.66	0.76	0.97	0.68
Harvest Rate, num./hr (intended)	0.07*	0.1*	0.07*	0.06*	0.07*	0.04*	0.01*	0.07*	0.06*	0.00
% Released	89.0%	88.9%	89.8%	94.1%	93.4%	92.4%	96.0%	92.4%	94.9%	91.2%
Mean Weight	2.56	2.05	2.74	2.91	2.79	2.80	2.66	2.46	2.98	2.94

note: \* represents any black bass

**Smallmouth Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	-	0.20	-	1.20	-	1.20	-	0.20	-	-
CPUE (mid-summer seine)	1.80	0.60	0.30	1.00	0.70	1.40	0.10	0.50	0.30	1.80
<b>Density</b> (spring electrofishing)										
PSD	-	67	-	71	-	93	-	91	-	-
RSD (preferred)	-	47	-	29	-	57	-	55	-	-
CPUE (preferred)	-	-	-	-	-	1.0	-	-	-	-
CPUE (total)	-	6.2	-	2.6	-	4.0	-	2.4	-	-
CPUE ≥ Stock	-	6.0	-	1.4	-	2.8	-	2.2	-	-
CPUE ≥ Preferred	-	2.8	-	0.4	-	1.6	-	0.2	-	-
CPUE ≥ MLL (18-inches)	-	0.6	-	-	-	-	-	-	-	-
<b>Growth</b> (spring electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	278.0	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	-	78.9	-	90.2	-	91.2	-	88.1	-	-
Quality	-	72.8	-	79.7	-	79.5	-	93.6	-	-
Preferred	-	89.2	-	-	-	78.8	-	83.4	-	-
Memorable	-	89.2	-	90.9	-	84.4	-	86.5	-	-
<b>Mortality</b> (spring electrofishing)										
Total Mortality	-	61.0%	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (intended)	N/A	N/A	N/A	0.00	N/A	N/A	N/A	N/A	0.21	0.11
Catch Rate, num.hr (any black bass)	0.81	1.00	0.88	0.92	1.06	0.75	0.66	0.76	0.97	0.68
Harvest Rate, num./hr (intended)	0.07*	0.1*	0.07*	0.06*	0.07*	0.04*	0.01*	0.07*	0.06*	0.00
% Released	89.0%	88.9%	89.8%	94.1%	95.1%	97.6%	100.0%	92.0%	96.0%	96.9%
Mean Weight	2.56	2.05	2.74	2.91	4.49	4.61	N/A	3.88	3.57	3.43

note: \* represents any black bass

**Smallmouth Bass (Target Sample)**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	8.70	2.30			0.29		0.68			-
<b>Density</b> (electrofishing)										
PSD	47	41			72		73			-
RSD (preferred)	24.0	13.0			46.0		40.0			-
CPUE (preferred)	-	-								-
CPUE (total)	30.7	73.5			25.2		29.0			-
CPUE $\geq$ Stock	22.0	71.2			24.9		28.4			-
CPUE $\geq$ Preferred	5.1	9.3			11.5		11.5			-
CPUE $\geq$ MLL (18-inches)	0.8	1.1			3.6		3.2			-
<b>Growth</b> (electrofishing)										
Length Age-1										-
Length Age-3										-
<b>Condition</b> (spring electrofishing)										
Stock	91.2	88.3			88.0		98.3			-
Quality	86.3	87.4			84.1		92.5			-
Preferred	85.0	89.6			86.6		91.0			-
Memorable	88.8	93.1			84.8		85.4			-
<b>Mortality</b> (electrofishing)										
Total Mortality										-

Samples taken at night unless otherwise noted.

**Spotted Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (spring electrofishing)	-	0.60	-	3.20	-	-	-	0.20	-	-
CPUE (mid-summer seine)	2.40	0.50	0.80	3.70	0.40	0.00	0.60	0.30	0.10	1.50
<b>Density</b> (spring electrofishing)										
PSD	-	37	-	57	-	-	-	-	-	-
RSD (preferred)	-	0	-	9	-	-	-	-	-	-
CPUE (total)	-	5.9	-	10.8	-	1.4	-	0.4	-	-
CPUE ≥ Stock	-	5.4	-	7.1	-	-	-	0.2	-	-
<b>Growth</b> (spring electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	-	91.6	-	92.0	-	-	-	-	-	-
Quality	-	87.6	-	95.0	-	-	-	-	-	-
Preferred	-	-	-	98.0	-	-	-	-	-	-
<b>Mortality</b> (spring electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate, num./hr (intended)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.03	N/A
Catch Rate, num.hr (any black bass)	0.81	1.00	0.88	0.92	1.06	0.75	0.66	0.76	0.97	0.68
Harvest Rate, num./hr (any black bass)	0.07	0.10	0.07	0.06	0.07	0.04	0.01	0.07	0.06	0.07
% Released	89.0%	88.9%	89.8%	94.1%	97.1%	100.0%	100.0%	99.6%	100.0%	100.0%
Mean Weight	2.56	2.05	2.74	2.91	1.30	N/A	N/A	1.60	-	N/A



**Black Crappie**

	2005	2006	2007	2008	2009*	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	0.03	0.05	0.04	0.00	0.00	1.13		0.05	-	-
<b>Density</b> (electrofishing)										
PSD		100		-	63				83	-
RSD (preferred)		29		-	44				31	-
CPUE (total)		10.3		-	47.1	0.8			144.4	-
CPUE $\geq$ Stock		10.3		-	47.1				144.0	-
CPUE $\geq$ MLL (10-inches)		2.9		-	30.5				40.3	-
<b>Growth</b> (electrofishing)										
Length Age-1		-		-						-
Length Age-3		-		-						-
<b>Condition</b> (electrofishing)										
Stock		-		-	151.0				-	-
Quality		-		-	149.8				-	-
Preferred		-		-	125.3				-	-
Memorable		-		-	145.3				-	-
<b>Mortality</b> (electrofishing)										
Total Mortality										-
<b>Stocking</b>										
#	-	-	-	-	-					9,629
#/Acre	-	-	-	-	-					0.25
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	44,636	94,385	43,334	44,716	45,248	45,050	60,682	61,153	86,875	52,943
Angler Hours/Acre	1.13	2.38	1.09	1.13	1.14	1.14	1.53	1.56	2.23	1.35
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.53	1.68	1.78	2.44	1.32	1.69	1.64	1.96	2.79	1.75
Harvest Rate (any crappie)	0.53	0.76	0.87	1.05	0.65	0.83	0.71	0.83	1.15	1.01
% Released (black crappie)	62.8%	55.7%	53.0%	60.3%	54.6%	49.6%	68.5%	52.8%	71.9%	47.4%
Mean Weight (black crappie)	0.93	0.84	0.83	0.89	0.88	0.85	0.87	0.86	0.81	0.75
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	\$305,320	\$481,570	\$305,650	\$326,290	\$375,650	\$323,020	\$502,140	\$168,180	\$515,060	\$331,270

Non-target sample unless otherwise noted.

\* Targeted sample.

**Blacknose Crappie**

	2005	2006	2007	2008	2009*	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE								0.06		-
<b>Density</b> (electrofishing)										
PSD									80	-
RSD (preferred)									30	-
CPUE (total)					3.3	0.2			16.1	-
CPUE $\geq$ Stock									16.1	-
CPUE $\geq$ MLL (10-inches)									4.4	-
<b>Growth</b> (electrofishing)										
Length Age-1										-
Length Age-3										-
<b>Condition</b> (electrofishing)										
Stock									-	-
Quality									-	-
Preferred									-	-
Memorable									-	-
<b>Mortality</b> (electrofishing)										
Total Mortality										-
<b>Stocking</b>										
#						139,586	79,671	161,672		218,050
#/Acre						3.5	2.0	4.1		5.58
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	44,636	94,385	43,334	44,716	45,248	45,050	60,682	61,153	86,875	52,943
Angler Hours/Acre	1.13	2.38	1.09	1.13	1.14	1.14	1.53	1.56	2.23	1.35
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.53	1.68	1.78	2.44	1.32	1.69	1.64	1.96	2.79	1.75
Harvest Rate (any crappie)	0.53	0.76	0.87	1.05	0.65	0.83	0.71	0.83	1.15	1.01
% Released (blacknose crappie)	89.4%	47.7%	45.1%	8.0%	69.6%	41.3%	64.9%	31.8%	-	47.6%
Mean Weight (blacknose crappie)	1.07	0.99	1.19	1.46	1.43	0.99	1.13	1.19	1.06	0.81
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	\$305,320	\$481,570	\$305,650	\$326,290	\$375,650	\$323,020	\$502,140	\$168,180	\$515,060	\$331,270

Non-target sample unless otherwise noted.

\* Targeted sample.

White Crappie

	2005	2006	2007	2008	2009*	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	0.23	0.20	0.40	0.40	0.00	12.40	-	0.14	0.23	2.40
<b>Density</b> (electrofishing)										
PSD		97		100	100		-		74	57**
RSD (preferred)		40		88	87		-		32	57**
CPUE (total)		18.3		11.6	26.3	4.4	-		254.8	2.57**
CPUE $\geq$ Stock		18.3		11.6	26.3		-		254.4	0.08**
CPUE $\geq$ MLL (10-inches)		5.9		10.2	22.8		-		71.8	.06**
<b>Growth</b> (electrofishing)										
Length Age-1		-		-			-			-
Length Age-3		-		-			-			-
<b>Condition</b> (electrofishing)										
Stock		82.7		-	-		-		-	-
Quality		91.3		90.3	176.2		-		-	-
Preferred		87.1		88.8	163.7		-		-	-
Memorable		87.6		94.5	152.5		-		-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-			-			-
<b>Stocking</b>										
#	-	-	-	-	-		-			-
#/Acre	-	-	-	-	-		-			-
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	44,636	94,385	43,334	44,716	45,248	45,050	60,682	61,153	86,875	52,943
Angler Hours/Acre	1.13	2.38	1.09	1.13	1.14	1.14	1.53	1.56	2.23	1.35
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.53	1.68	1.78	2.44	1.32	7.69	1.64	1.96	2.79	1.75
Harvest Rate (any crappie)	0.53	0.76	0.87	1.05	0.65	0.83	0.71	0.83	1.15	1.01
% Released (white crappie)	63.2%	60.8%	42.3%	59.1%	48.7%	51.0%	56.4%	62.1%	63.5%	47.9%
Mean Weight (white crappie)	0.72	0.71	0.72	0.84	0.78	0.85	0.84	0.81	0.73	0.74
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	\$305,320	\$481,570	\$305,650	\$326,290	\$375,650	\$323,020	\$502,140	\$168,180	\$515,060	\$331,270

Non-target sample unless otherwise noted.

\* Targeted sample.

\*\* Data collected from trap netting

**Sauger**

	2005	2006	2007	2008	2009	2010*	2011	2012	2013	2014
<b>Recruitment</b> (gill netting)										
Substock CPUE						0.00				-
<b>Density</b> (gill netting)										
PSD						100				-
RSD (preferred)						63				-
CPUE (total)						9.8				-
CPUE $\geq$ Stock						9.8				-
CPUE $\geq$ MLL (15-inches)						6.1				-
<b>Growth</b> (gill netting)										
Length Age-1										-
Length Age-3										-
<b>Condition</b> (gill netting)										
Stock										-
Quality						92.3				-
Preferred						93.4				-
Memorable						45.4				-
<b>Mortality</b> (gill netting)										
Total Mortality										-
<b>Stocking</b>										
#	25,424	204,365	99,301	174,339	121,100	33,725	-			-
#/Acre	0.6	5.2	2.5	4.4	3.1	0.9	-			-
<b>Angling Pressure</b> (creel)										
Angler Hours	25,930	13,436	10,299	9,236	12,593	10,891	12,793	11,910	1,241	1,914
Angler Hours/Acre	0.65	0.34	0.26	0.23	0.32	0.28	0.32	0.30	0.03	0.05
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	1.69	0.67	1.37	1.95	1.40	1.37	0.76	0.81	1.81	0.15
Harvest Rate (intended)	0.49	0.28	0.44	0.24	0.39	0.40	0.28	0.23	0.36	0.09
% Released	71.5%	67.9%	71.4%	87.4%	70.7%	72.8%	72.8%	68.6%	75.1%	81.2%
Mean Weight	1.57	1.55	1.64	1.58	1.60	1.53	1.46	1.57	1.52	1.27
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Sauger	\$119,330	\$71,530	\$64,830	\$75,540	\$90,340	\$76,550	\$54,680	\$38,230	\$13,930	\$15,540

\* These fish were collected by Eagle Bend Fish Hatchery as part of brood fish collections.

**Walleye**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (gill netting)										
Substock CPUE										-
<b>Density</b> (gill netting)										
PSD										-
RSD (preferred)										-
CPUE (total)										-
CPUE $\geq$ Stock										-
CPUE $\geq$ MLL (15-inches)										-
<b>Growth</b> (gill netting)										
Length Age-1										-
Length Age-3										435.0
<b>Condition</b> (gill netting)										
Stock										101.1
Quality										97.7
Preferred										97.3
Memorable										-
<b>Mortality</b> (gill netting)										
Total Mortality										-
<b>Stocking</b>										
#							222,316	339,281	252,460	332,666
#/Acre							5.6	8.6	6.5	8.5
<b>Angling Pressure</b> (creel)										
Angler Hours										1,925
Angler Hours/Acre										0.05
<b>Fishing Success</b> (creel)										
Catch Rate (intended)								-		0.05
Harvest Rate (intended)								-		0.00
% Released								81.8%		100.0%
Mean Weight								1.91		N/A
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Walleye								-		\$11,160

**Striped Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (gill netting)										
Substock CPUE	-	0.13	-	0.05						-
<b>Density</b> (gill netting)										
PSD	-	-	-	13						-
RSD (preferred)	-	3	-	2						-
CPUE (total)	-	0.2	-	0.4						-
CPUE $\geq$ Stock	-	0.1	-	0.3						-
CPUE $\geq$ 15-inches	-	0.1	-	-						-
<b>Growth</b> (gill netting)										
Length Age-2	-	-	-	-						-
Length Age-3	-	-	-	-						-
<b>Condition</b> (gill netting)										
Stock	-	94.4	-	99.4						-
Quality	-	-	-	81.8						-
Preferred	-	89.2	-							-
Memorable	-	-	-							-
<b>Mortality</b> (gill netting)										
Total Mortality	-		-							-
<b>Stocking</b>										
#	289,421	301,316	353,983		253,429	213,406	226,280	241,122	212,648	151,007
#/Acre	7.3	7.6	8.9	0.0	6.4	5.4	5.7	6.1	5.4	3.9
<b>Angling Pressure</b> (creel)										
Angler Hours	42,712	19,110	24,280	20,108	12,298	36,702	26,063	33,486	40,138	27,137
Angler Hours/Acre	1.08	0.48	0.61	0.51	0.31	0.93	0.66	0.86	1.03	0.69
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.85	0.81	0.53	0.38	0.72	0.85	0.54	0.41	0.86	0.61
Harvest Rate (intended)	0.23	0.21	0.14	0.11	0.23	0.08	0.02	0.01	0.12	0.07
% Released	73.1%	73.1%	70.2%	79.1%	72.9%	89.7%	94.9%	98.2%	89.8%	88.5%
Mean Weight	13.05	15.02	16.30	17.50	16.59	17.29	16.63	18.45	21.19	10.68
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Striped Bass	\$267,580	\$134,040	\$161,440	\$277,270	\$140,060	\$436,990	\$542,880	\$183,480	\$335,400	\$311,090

**Bluegill**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (electrofishing)		0.60								
CPUE (mid-summer seine)	11.40	21.40	12.10	7.30	17.40	6.70	6.00	3.80	7.30	2.70
Substock CPUE (trap netting)										2.65**
<b>Density</b> (electrofishing)										
PSD		16								
RSD (preferred)		0								
CPUE (total)		19.4								3.55**
CPUE $\geq$ Stock		18.8								0.9**
<b>Growth</b> (electrofishing)										
Length Age-1		-								-
Length Age-3		125.0								-
<b>Condition</b> (spring electrofishing)										
Stock		-								-
Quality		-								-
Preferred		-								-
<b>Mortality</b> (electrofishing)										
Total Mortality		-								-
<b>Angling Pressure</b> (creel)										
Angler Hours (all sunfish)	3,643	2,146	860	-	241	N/A	502	N/A	2,672	3,999
Angler Hours/Acre	0.1	0.1	0.0	-	0.0	N/A	0	N/A	0.1	0.1
<b>Fishing Success</b> (creel)										
Catch Rate (any sunfish)	6.90	0.89	8.86	-	14.62	N/A	0.00	N/A	2.24*	3.26*
Harvest Rate (any sunfish)	3.60	0.89	3.18	-	6.92	N/A	0.00	N/A	0.29*	.67*
% Released (bluegill)	65.0%	66.3%	64.7%	85.7%	74.2%	94.7%	95.4%	84.3%	85.2%	83.4%
Mean Weight (bluegill)	0.26	0.25	0.25	0.26	0.26	0.23	0.25	0.29	0.21	0.22
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Sunfish	\$12,420	\$2,640	\$2,440	-	\$2,080	N/A	\$8,710	N/A	\$7,560	\$15,320

Non-target sample unless otherwise noted.

\*Bluegill only

\*\* Data collected from trap netting

**Redear**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b>										
Substock CPUE (electrofishing)		0.00								-
CPUE (mid-summer seine)	0.00	0.00	0.20	0.00	0.10	0.00	0.80	1.30	0.10	-
<b>Density (electrofishing)</b>										
PSD		95								-
RSD (preferred)		27								-
CPUE (total)		8.8								-
CPUE $\geq$ Stock		8.8								-
<b>Growth (electrofishing)</b>										
Length Age-1		-								-
Length Age-3		-								-
<b>Condition (spring electrofishing)</b>										
Stock		-								-
Quality		-								-
Preferred		-								-
<b>Mortality (electrofishing)</b>										
Total Mortality		-								-
<b>Angling Pressure (creel)</b>										
Angler Hours (all sunfish)	3,643	2,146	860	N/A	241	N/A	540	N/A	2,672	3,999
Angler Hours/Acre	0.1	0.1	0.0	N/A	0.0	N/A	0	N/A	0.1	0.1
<b>Fishing Success (creel)</b>										
Catch Rate (any sunfish)	6.90	0.89	8.86	N/A	14.62	N/A	0.00	N/A	0.14*	.10*
Harvest Rate (any sunfish)	3.60	0.89	3.18	N/A	6.92	N/A	0.00	N/A	0.05*	.05*
% Released (redeer)					6.0%	39.0%	0.0%	26.5%	47.1%	60.3%
Mean Weight (redeer)					0.43	0.34	0.60	0.31	0.35	0.32
<b>Value of Fishery (Trip Expenditures - creel)</b>										
All Sunfish	\$12,420	\$2,640	\$2,440	N/A	\$2,080	N/A	\$8,710	N/A	\$7,560	\$15,320

Non-target sample unless otherwise noted.

\*Redear only



**Catfish**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure (creel)</b>										
Angler Hours (all catfish)	50,743	55,643	47,615	58,667	66,758	78,566	71,031	63,895	24,176	53,113
Angler Hours/Acre	1.28	1.41	1.20	1.48	1.69	1.98	1.79	1.63	0.62	1.36
<b>Fishing Success (creel)</b>										
Catch Rate (any catfish)	1.64	1.52	1.46	1.32	1.48	1.12	1.03	1.11	1.81	1.49
Harvest Rate (any catfish)	1.02	0.87	0.89	0.65	0.67	0.30	0.29	0.29	0.35	0.31
% Released (channel)	47.6%	36.5%	41.4%	48.0%	62.2%	69.4%	58.1%	70.1%	76.1%	81.7%
Mean Weight (channel)	2.82	2.88	3.30	3.02	2.89	2.91	3.23	2.82	3.10	2.80
<b>Value of Fishery (Trip Expenditures - creel)</b>										
All Catfish	\$274,840	\$353,330	\$328,660	\$405,610	\$503,670	\$577,920	\$399,810	\$185,020	\$189,640	\$412,880

**Shad**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density (electrofishing)</b>										
Alewife CPUE				-				-		-
Gizzard CPUE				29.2				13.2		72.0
Threadfin CPUE				102.0				59.2		9.2

**Habitat Enhancement - 2014**

Type of Work	Details	Quantity	
		New	Renovated
none performed			

**Water Quality Monitoring - 2014**

Parameter	Sampling Period	Water Quality
Temperature		
Dissolved Oxygen		
PH		
Conductivity		

## REGION 4

## Boone Reservoir

### Description

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<b>Surface Area:</b> 4,520 acres	<b>Shoreline Distance:</b> 127 miles
<b>Counties:</b> Sullivan, Washington	<b>Drainage Area:</b> 1840 square miles
<b>Full Pool Elevation:</b> 1384 feet above mean sea level	<b>Mean Annual Fluctuation:</b> 54 feet
<b>Maximum Depth:</b> 122 feet	<b>Thermocline Depth:</b> 7 feet
<b>Mean Chlorophyll (Forebay):</b> 10.8 parts per million	<b>Shoreline Development:</b> 13%
<b>Trophic Status (Forebay):</b> Mesotrophic	<b>Trophic Index, Carlson (1977):</b> 53.9
<b>Hydraulic Retention Time:</b> 38 days	<b>Reservoir Age:</b> 63 years (dam completed 1952)
<b>Total Fishing Effort:</b> 132,714 hours	<b>Total Value by Anglers:</b> \$534,030

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### Summary:

### Electrofishing

The 2014 largemouth bass CPUE was a little below average, at 48.3 fish/hour. We collected a large percentage (56%) of fish between 10 and 14-inches. These fish should grow bigger in 2014 and recruit into larger size classes, which will increase the percentage of fish over the 15-inch MLL. This will result in more keeper size fish for anglers to catch in 2015. The largemouth bass relative weights were about average for Boone Reservoir.

Smallmouth bass catch rates were about average for 2014, at 17 fish/hour. There is a large percentage of smallmouth bass between 9 to 13 inches (46%). Hopefully, these fish will recruit into the larger size classes and result in more fish for anglers to catch above the 15-inch MLL. The smallmouth bass relative weights were about average for Boone Reservoir.

Black crappie catch rates for 2014 were about average for Boone Reservoir. We also saw good percentages of crappie between 7 and 10-inches. These fish should recruit into larger size classes and result in more fish over the 10-inch MLL in 2015.

### Gill Netting

Five, 300' nets were set on Boone Reservoir on February 26, 2014 to sample striped bass and hybrid striped bass (cherokee bass) within the reservoir. We collected a total of 241 hybrid striped bass and 123 striped bass, ranging from 13 to 31-inches. This was the largest sample of morones that has been collected on Boone Reservoir. This sample will give us excellent length frequency and relative weight information.

There was a very large percentage (92%) of hybrid striped bass collected over the 15-inch size limit. There was also a large percentage (94%) of striped bass collected over the 15-inch size limit that is in effect from April 1<sup>st</sup> to October 31<sup>st</sup>. This should mean there will be plenty of keeper size fish for anglers in 2014.

Relative weights of both striped bass and hybrid striped bass were within the normal range for each species, and the morone population on Boone Reservoir appears to be healthy and stable.

### **Shad Netting**

Shad netting was conducted on Boone Reservoir in September of 2014. A total of ten nets were set on the Watauga River arm and a total of ten nets were set on the Holston River arm. Three shad species (Gizzard, Threadfin, and Alewife) were collected, weighed, and measured to determine densities and overall health of the shad populations on Boone Reservoir.

### **Habitat Enhancement**

Habitat enhancement work was conducted on Boone Reservoir at Wing Deer Park, Devault Bridge, and at the TVA access area near Boone Dam. The work consisted of refurbishing brush sites with recycled Christmas trees with rope and drive in anchors. There was a total of 2,498 trees placed in these areas for fish habitat.

### **Water Quality**

Water quality sampling was conducted at three sites on Boone Reservoir during the months of July, August, and September. The water quality samples were all normal for Boone Reservoir.

### **Lakewide Angling Summary**

<b>Total Effort and Expenditures</b>										
	<b>2005</b>	2006	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Angling Pressure										
Angler Hours	108,189	85,905	840,985	no survey	no survey	147,294	no survey	no survey	no survey	132,714
Angler Hours Per Acre	24.1	19.0	18.6	no survey	no survey	32.6	no survey	no survey	no survey	29.4
Angler Trips	16,681	13,498	13,022	no survey	no survey	26,804	no survey	no survey	no survey	24,087
Value of Fishery (angler expenditures creel)										
All Species	\$210,660	\$160,020	\$166,960	no survey	no survey	\$511,340	no survey	no survey	no survey	\$534,030

**Black Bass, Boone Reservoir**

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Angling Pressure</b> (creel survey data)												
All Black Bass	(hrs)	63,918	51,416	49,352	86,235	no survey	82,967	70,850	no survey	no survey	82,216	69,565
	(hrs/acre)	14.1	11.4	10.9	19.1	no survey	18.4	15.7	no survey	no survey	18.2	15.4
Any Black Bass	(hrs)	62,545	49,785	47,724	84,872	no survey	81,263	70,007	no survey	no survey	81,617	68,259
	(hrs/acre)	13.8	11.0	10.6	18.8	no survey	18.0	15.5	no survey	no survey	18.1	15.1
Largemouth Bass	(hrs)	178	146	0	236	no survey	1,055	0	no survey	no survey	335	279
	(hrs/acre)	0.0	0.0	0.0	0.1	no survey	0.2	0.0	no survey	no survey	0.1	0.1
Smallmouth Bass	(hrs)	1,195	1,485	1,628	1,127	no survey	649	843	no survey	no survey	264	1,027
	(hrs/acre)	0.3	0.3	0.4	0.2	no survey	0.1	0.2	no survey	no survey	0.0	0.2
Spotted Bass	(hrs)	0	0	0	0	no survey	0	0	no survey	no survey	0	0
	(hrs/acre)	0.0	0.0	0.0	0.0	no survey	0.0	0.0	no survey	no survey	0.0	0.0
<b>Tournaments</b> (BITE program & creel survey data)												
# Tournaments (BITE)		none	2	none	none	7	none	none	none	none	none	4.5
Pounds/Angler Day (BITE)		reported	2.84	reported	reported	4.64	reported	reported	reported	reported	reported	3.74
Bass/Angler Day (BITE)			1.19			2.17						1.68
<b>Value of Fishery</b> (creel survey data - trip expenditures)												
All Black Bass		\$139,480	\$109,680	\$109,650	\$319,140	no survey	\$269,530	\$265,860	no survey	no survey	\$300,270	\$216,230
Any Black Bass		\$136,730	\$106,360	\$106,840	\$304,620	no survey	\$264,940	\$262,270	no survey	no survey	\$297,670	\$211,347
Largemouth Bass		\$270	\$620	\$0	\$2,360	no survey	\$3,400	\$0	no survey	no survey	\$1,640	\$1,184
Smallmouth Bass		\$2,480	\$2,700	\$2,810	\$12,160	no survey	\$1,190	\$3,590	no survey	no survey	\$960	\$3,699
Spotted Bass		\$0	\$0	\$0	\$0	no survey	\$0	\$0	no survey	no survey	\$0	\$0

**Largemouth Bass, Boone Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (electrofishing data - CPUE = # fish/hour)											
Age-1 CPUE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	no survey	N/A	N/A
Substock CPUE	3.1	3.7	13.0	18.0	20.0	13.5	17.7	8.0	no survey	4.6	11.3
<b>Density</b> (electrofishing data - CPUE = # fish/hour)											
PSD	86%	89%	68%	72%	70%	68%	76%	70%	no survey	83%	76%
RSD - Preferred	48%	64%	46%	35%	38%	30%	32%	30%	no survey	33%	40%
CPUE	58.8	38.4	58.3	108.0	95.4	99.0	110.0	70.2	no survey	48.3	76.3
CPUE ≥ Stock	55.7	34.7	44.8	89.7	75.4	85.5	92.3	62.2	no survey	43.7	64.9
CPUE ≥ MSL (15")	16.7	20.4	19.7	28.6	24.3	22.5	24.9	14.8	no survey	12.3	20.5
<b>Growth</b> (electrofishing data)											
Mean TL at Age-1 (mm)	142	N/A	N/A	N/A	N/A	N/A	N/A	N/A	no survey	N/A	142
Mean TL at Age-3 (mm)	334	N/A	N/A	N/A	N/A	N/A	N/A	N/A	no survey	N/A	334
<b>Relative Weight</b> (electrofishing data)											
Stock - Quality	94.4	89.6	92.3	89.5	87.5	86.5	85.9	84.2	no survey	81.1	87.9
Quality - Preferred	87.1	89.2	95.2	91.8	88.9	85.3	86.3	88.0	no survey	82.3	88.2
Preferred - Memorable	90.7	95.6	94.5	94.7	90.6	88.0	87.8	90.0	no survey	86.3	90.9
Memorable - Trophy	100.2	98.1	92.0	93.1	96.7	83.2	89.7	101.3	no survey	96.4	94.5
Trophy	none	none	none	none	none	none	none	none	no survey	none	none
<b>Mortality</b> (electrofishing data)											
Total Mortality	0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.31
<b>Fishing Success</b> (creel survey data)											
Catch Rate	0.23	0.14	0.16	0.23	no survey	0.32	0.36	no survey	no survey	0.23	0.22
Harvest Rate	0.01	0.01	0.01	0.00	no survey	0.01	0.01	no survey	no survey	0.00	0.01
Percent Harvested	3.2%	5.2%	6.8%	1.9%	no survey	3.3%	2.1%	no survey	no survey	2.0%	4.1%
Mean Weight (pounds)	2.67	2.99	2.84	2.76	no survey	2.1	2.38	no survey	no survey	2.44	2.67

**Smallmouth Bass, Boone Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (electrofishing data - CPUE = # fish/hour)											
Age-1 CPUE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	no survey	N/A	N/A
Substock CPUE	2.3	0.9	1.1	3.7	1.7	3.7	1.4	1.7	no survey	4.3	2.3
<b>Density</b> (electrofishing data - CPUE = # fish/hour)											
PSD	49%	66%	79%	73%	73%	54%	73%	72%	no survey	63%	67%
RSD - Preferred	25%	37%	71%	50%	55%	17%	41%	43%	no survey	37%	42%
CPUE	21.2	11.3	13.1	29.4	16.3	29.0	34.3	17.1	no survey	26.2	22.0
CPUE ≥ Stock	18.9	10.8	12.0	25.7	14.6	25.3	32.9	15.4	no survey	21.8	19.7
CPUE ≥ MSL (15")	3.4	3.1	6.0	7.4	5.4	2.8	8.0	4.8	no survey	5.5	5.2
<b>Growth</b> (electrofishing data)											
Mean TL at Age-1 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	no survey	N/A	N/A
Mean TL at Age-3 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	no survey	N/A	N/A
<b>Relative Weight</b> (electrofishing data)											
Stock - Quality	85.2	90.2	85.5	86.1	83.5	82.4	83.9	82.3	no survey	79.4	84.3
Quality - Preferred	80.5	82.2	83.3	83.3	81.6	83.9	82.8	83.2	no survey	80.0	82.3
Preferred - Memorable	80.4	87.8	82.9	83.2	81.7	79.9	84.0	83.3	no survey	75.3	82.1
Memorable - Trophy	82.2	78.6	80.6	79.8	80.6	80.5	82.9	80.9	no survey	69.3	79.5
Trophy	none	none	none	none	none	none	none	none	no survey	none	none
<b>Mortality</b> (electrofishing data)											
Total Mortality	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Fishing Success</b> (creel survey data)											
Catch Rate	0.17	0.13	0.14	0.21	no survey	0.21	0.19	no survey	no survey	0.16	0.17
Harvest Rate	0.01	0.01	0.01	0.00	no survey	0.00	0.01	no survey	no survey	0.01	0.01
Percent Harvested	5.5%	8.6%	6.5%	3.6%	no survey	2.1%	3.2%	no survey	no survey	5.3%	5.0%
Mean Weight (pounds)	2.19	2.41	2.4	2.62	no survey	3.02	2.81	no survey	no survey	2.56	2.57

**Spotted Bass, Boone Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (electrofishing data - CPUE = # fish/hour)											
Age-1 CPUE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	no survey	N/A	N/A
Substock CPUE	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.1	no survey	0.6	0.2
<b>Density</b> (electrofishing data - CPUE = # fish/hour)											
PSD	100%	none	50%	100%	0%	100%	58%	8%	no survey	38%	57%
RSD - Preferred	100%	none	0%	0%	0%	0%	12%	8%	no survey	6%	16%
CPUE	0.3	0.0	0.6	2.0	2.0	0.6	7.7	4.5	no survey	16.0	3.7
CPUE ≥ Stock	0.3	0.0	0.6	2.0	2.0	0.6	7.4	3.4	no survey	16.6	3.7
<b>Growth</b> (electrofishing data)											
Mean TL at Age-1 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	no survey	N/A	N/A
Mean TL at Age-3 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	no survey	N/A	N/A
<b>Relative Weight</b> (electrofishing data)											
Stock - Quality	none	none	88.6	none	101.1	none	95.6	92.0	no survey	92.5	94.0
Quality - Preferred	none	none	97.7	106.6	none	91.8	94.0	none	no survey	88.2	95.7
Preferred - Memorable	99.0	none	none	none	none	none	94.5	85.8	no survey	97.8	94.3
Memorable - Trophy	none	none	none	none	none	none	none	none	no survey	none	none
Trophy	none	none	none	none	none	none	none	none	no survey	none	none
<b>Mortality</b> (electrofishing data)											
Total Mortality	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Fishing Success</b> (creel survey data)											
Catch Rate	N/A	N/A	N/A	0.01	no survey	0.04	0.04	no survey	no survey	0.07	0.04
Harvest Rate	N/A	N/A	N/A	0.00	no survey	0.00	0.00	no survey	no survey	0.00	0.00
Percent Harvested	0%	N/A	N/A	0%	no survey	4.6%	1%	no survey	no survey	0.0%	1%
Mean Weight (pounds)	N/A	N/A	N/A	N/A	no survey	1.65	1	no survey	no survey	N/A	1.33



**White Crappie, Boone Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (electrofishing data - CPUE = # fish/ hour)											
Age-0 CPUE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	no survey	N/A	N/A
Substock CPUE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	no survey	0.0	0.0
<b>Density</b> (electrofishing data - CPUE = # fish/ hour)											
PSD	none	100%	none	100%	100%	100%	100%	100%	no survey	100%	100%
RSD - Preferred	none	50%	none	100%	100%	89%	0%	50%	no survey	0%	56%
CPUE	0.0	0.6	0.0	0.3	0.3	2.6	0.6	0.6	no survey	0.3	0.6
CPUE ≥ Stock	0.0	0.3	0.0	0.3	0.3	2.6	0.6	0.6	no survey	0.3	0.5
CPUE ≥ MSL (10")	0.0	0.3	0.0	0.3	0.3	2.3	0.0	0.3	no survey	0.0	0.4
<b>Growth</b> (electrofishing data)											
Mean TL at Age-1 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	no survey	N/A	N/A
Mean TL at Age-3 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	no survey	N/A	N/A
<b>Relative Weight</b> (electrofishing data)											
Stock - Quality	none	none	none	none	none	none	none	none	no survey	none	none
Quality - Preferred	none	105.5	none	none	none	110.9	109.2	89.0	no survey	102.0	103.3
Preferred - Memorable	none	92.4	none	none	none	98.2	none	none	no survey	none	95.3
Memorable - Trophy	none	none	none	96.7	94.2	99.4	none	100.0	no survey	none	97.6
Trophy	none	none	none	none	none	none	none	none	no survey	none	none
<b>Mortality</b> (electrofishing data)											
Total Mortality	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Stocking</b>											
# per Acre	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Angling Pressure</b> (creel survey data - any crappie)											
Angler Hours	8,936	8,748	8,783	8,067	no survey	4,367	4,669	no survey	no survey	3,109	6,668
Angler Hours/Acre	2.0	1.9	1.9	1.8	no survey	1.0	1.0	no survey	no survey	0.6	1.5
<b>Fishing Success</b> (creel survey data)											
Catch Rate	0.01	0.01	0.02	0.65	no survey	0.05	0.01	no survey	no survey	N/A	0.13
Harvest Rate	0.00	0.01	0.01	0.22	no survey	0.01	none	no survey	no survey	N/A	0.05
Percent Harvested	38.9%	100.0%	79.5%	30.0%	no survey	18.2%	none	no survey	no survey	N/A	53.3%
Mean Weight (pounds)	1.05	1.07	1.08	0.81	no survey	1.1	none	no survey	no survey	N/A	1.02
<b>Value of Fishery</b> (creel survey data - trip expenditures)											
Any Crappie	\$12,950	\$12,820	\$13,860	\$20,710	no survey	\$7,730	\$6,850	no survey	no survey	\$8,990	\$11,987

**Black Crappie, Boone Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (electrofishing data) - CPUE = # fish/ hour)											
Age-0 CPUE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	no survey	N/A	N/A
Substock CPUE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	no survey	0.0	0.0
<b>Density</b> (electrofishing data - CPUE = # fish/ hour)											
PSD	97%	100%	100%	91%	92%	90%	96%	75%	no survey	82%	91%
RSD - Preferred	74%	100%	72%	52%	44%	42%	51%	33%	no survey	36%	56%
CPUE	22.4	0.9	8.3	13.1	17.4	8.9	15.1	6.9	no survey	7.4	11.2
CPUE ≥ Stock	20.4	0.9	8.3	13.1	17.4	8.9	15.1	6.9	no survey	7.4	10.9
CPUE ≥ MSL (10")	13.3	0.9	6.0	6.6	6.9	3.1	7.4	2.0	no survey	3.1	5.5
<b>Growth</b> (electrofishing data)											
Mean TL at Age-1 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	no survey	N/A	N/A
Mean TL at Age-3 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	no survey	N/A	N/A
<b>Relative Weight</b> (electrofishing data)											
Stock - Quality	104.3	none	none	92.8	88.0	91.9	93.1	90.0	no survey	93.0	93.3
Quality - Preferred	88.9	none	98.1	95.9	90.2	86.0	91.0	87.5	no survey	85.0	90.3
Preferred - Memorable	90.5	76.2	90.9	92.0	89.5	89.0	88.7	87.2	no survey	88.3	88.0
Memorable - Trophy	85.6	88.9	89.6	86.5	87.7	77.8	87.5	81.6	no survey	83.0	85.4
Trophy	none	none	none	none	none	none	none	none	no survey	none	none
<b>Mortality</b> (electrofishing data)											
Total Mortality	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Stocking</b>											
# per Acre	0.0	0.0	6.1	10.6	10.7	0.0	10.4	10.8	13.9	9.8	7.2
<b>Angling Pressure</b> (creel survey data - any crappie)											
Angler Hours	8,936	8,748	8,783	8,067	no survey	4,367	4,669	no survey	no survey	3,109	6,668
Angler Hours/Acre	2.0	1.9	1.9	1.8	no survey	1.0	1.0	no survey	no survey	0.6	1.5
<b>Fishing Success</b> (creel survey data)											
Catch Rate	0.13	0.09	0.11	0.58	no survey	0.57	0.46	no survey	no survey	0.56	0.36
Harvest Rate	0.08	0.07	0.07	0.14	no survey	0.34	0.30	no survey	no survey	0.26	0.18
Percent Harvested	51.7%	69.2%	53.6%	22.5%	no survey	60.1%	64.2%	no survey	no survey	75.0%	56.6%
Mean Weight (pounds)	0.79	0.88	0.86	0.91	no survey	1.13	0.97	no survey	no survey	1.44	1.00
<b>Value of Fishery</b> (creel survey data - trip expenditures)											
Any Crappie	\$12,950	\$12,820	\$13,860	\$20,710	no survey	\$7,730	\$6,850	no survey	no survey	\$8,990	\$11,987

**Striped Bass, Boone Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (summer shad gill net data - CPUE = # fish/net night))											
Substock CPUE	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0	0.0	0.0
<b>Density</b> (summer shad gill net data - CPUE = # fish/net night)											
PSD	33%	40%	0%	23%	27%	52%	63%	60%	24%	24%	35%
RSD - Preferred	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%
CPUE	0.7	0.5	0.7	2.0	4.8	2.5	1.5	0.3	0.9	0.7	1.4
CPUE ≥ Stock	0.6	0.5	0.7	2.0	4.7	2.4	1.5	0.3	0.9	0.7	1.4
CPUE ≥ 15"	0.5	0.3	0.5	3.5	3.6	2.2	1.4	0.2	0.8	0.6	1.3
<b>Growth</b> (summer shad gill net data)											
Mean TL at Age-1 (mm)	370	370	399	384	385	367	369	387	365	386	378
Mean TL at Age-3 (mm)	669	673	N/A	N/A	664	621	608	N/A	603	570	630
<b>Relative Weight</b> (winter gill net; data 300' nets)											
Stock - Quality	no survey	N/A	N/A	98.6	103.5	111.8	no survey	96.5	none	107.9	103.7
Quality - Preferred	no survey	106.8	N/A	95.2	93.3	92.1	no survey	91.9	99.6	106.7	97.9
Preferred - Memorable	no survey	92.2	78	N/A	97.3	92.5	no survey	84.9	93.0	96.0	90.6
Memorable - Trophy	no survey	93.7	N/A	93.4	none	none	no survey	none	64.8	none	84.0
Trophy	no survey	N/A	N/A	N/A	none	none	no survey	none	none	none	N/A
<b>Mortality</b> (summer shad gill net data)											
Total Mortality	*	*	*	*	*	*	*	*	*	*	*
<b>Stocking</b>											
# per Acre	2.7	5.6	9.9	5.9	6.2	5.7	5.6	5.2	4.9	2.2	5.4
<b>Angling Pressure</b> (creel survey data - striped bass only)											
Angler Hours	9,898	9,069	8,798	10,954	no survey	16,310	12,037	no survey	no survey	6,875	10,563
Angler Hours/Acre	2.2	2.0	1.9	2.4	no survey	3.6	2.7	no survey	no survey	1.5	2.3
<b>Fishing Success</b> (creel survey data - striped bass only)											
Catch Rate	0.02	0.04	0.03	0.05	no survey	0.19	0.15	no survey	no survey	0.39	0.12
Harvest Rate	0.00	0.01	0.01	0.00	no survey	0.03	0.02	no survey	no survey	0.01	0.01
Percent Harvested	0.6%	23.9%	20.3%	5.6%	no survey	11.1%	15.5%	no survey	no survey	3.7%	11.5%
Mean Weight (pounds)	4.78	9.96	10.55	16.16	no survey	11.13	6.55	no survey	no survey	14.8	10.56143
<b>Value of Fishery</b> (creel survey data - trip expenditures)											
Any Morones	\$16,740	\$9,500	\$13,990	\$770	no survey	\$13,980	\$11,800	no survey	no survey	\$144,960	\$30,249
Striped Bass Only	\$20,580	\$15,990	\$15,080	\$42,810	no survey	\$130,950	\$59,550	no survey	no survey	\$48,320	\$47,611

\*data did not meet criteria for calculating mortality

**Hybrid Striped Bass, Boone Reservoir****Hybrid Striped Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (summer shad gill net data - CPUE = # fish/net night)											
Substock CPUE	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.00	0.0	0.0
<b>Density</b> (summer shad gill net data - CPUE = # fish/net night)											
PSD	77%	78%	100%	100%	97%	100%	100%	100%	98%	98%	95%
RSD - Preferred	54%	50%	78%	85%	71%	87%	88%	91%	95%	95%	79%
CPUE	2.5	2.8	1.4	4.1	3.9	3.9	2.3	2.3	2.1	0.8	2.6
CPUE ≥ Stock	2.4	2.8	1.4	4.1	3.9	3.9	2.2	2.3	2.1	0.8	2.6
CPUE ≥ MSL (15")	1.2	1.3	1.1	3.5	2.7	3.1	1.8	2.0	1.8	0.6	1.9
<b>Growth</b> (summer shad gill net data)											
Mean TL at Age-1 (mm)	319	347	370	407	353	385	366	356	352	372	363
Mean TL at Age-3 (mm)	572	584	560	576	554	549	504	538	530	531	550
<b>Relative Weight</b> (winter gill net data)											
Stock - Quality	none	none	168.3	none	none	none	no survey	none	none	none	168.3
Quality - Preferred	none	93.1	none	none	none	none	no survey	none	none	92.2	92.65
Preferred - Memorable	88.1	90.4	98.9	95.2	90.8	93.6	no survey	88.0	105.5	95.7	94.0
Memorable - Trophy	90.7	90.8	91.1	98.2	91.7	90.8	no survey	88.3	100.4	95.0	93.0
Trophy	none	none	none	none	none	none	no survey	none	none	none	N/A
<b>Mortality</b> (summer shad gill net data)											
Total Mortality	*	*	*	*	*	*	*	*	*	*	*
<b>Stocking</b>											
# per Acre	3.6	2.7	3.2	5.1	6.9	4.9	7.2	7.7	5.6	7.1	5.4
<b>Angling Pressure</b> (creel survey data - hybrid striped bass only)											
Angler Hours	1,061	9,069	260	2,300	no survey	4,236	1,576	no survey	no survey	447	2,707
Angler Hours/Acre	0.2	2.0	0.1	0.5	no survey	0.9	0.3	no survey	no survey	0.1	0.6
<b>Fishing Success</b> (creel survey data - hybrid striped bass only)											
Catch Rate	0.02	0.02	0.02	0.02	no survey	0.21	0.09	no survey	no survey	0.38	0.11
Harvest Rate	0.01	0.02	0.02	0.00	no survey	0.03	0.00	no survey	no survey	0.04	0.02
Percent Harvested	20.6%	32.5%	31.1%	17.3%	no survey	14.0%	9.6%	no survey	no survey	24.5%	21.4%
Mean Weight (pounds)	3.06	2.96	3.03	4.64	no survey	6.19	4.12	no survey	no survey	6.6	4.37
<b>Value of Fishery</b> (creel survey data - trip expenditures)											
Any Morones	\$16,740	\$9,500	\$13,990	\$770	no survey	\$13,980	\$11,800	no survey	no survey	\$144,960	\$30,249
Hybrid Striped Bass Only	\$2,140	\$0	\$550	\$6,240	no survey	\$17,320	\$4,110	no survey	no survey	\$0	\$4,337

\* Data did not meet criteria for calculating mortality.

**Sunfish, Boone Reservoir**

Sunfish	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Angling Pressure</b> (creel survey data - any sunfish)											
Angler Hours	3,386	833	1,955	6,985	no survey	6,968	5,757	no survey	no survey	4,801	4,384
Angler Hours/Acre	0.7	0.2	0.4	1.5	no survey	1.5	1.3	no survey	no survey	1.1	1.0
<b>Fishing Success</b> (creel survey data - bluegill only)											
Catch Rate (bluegill)	1.10	1.58	2.16	3.01	no survey	3.53	2.65	no survey	no survey	2.15	2.31
Harvest Rate (bluegill)	0.10	0.27	0.55	0.42	no survey	0.63	0.26	no survey	no survey	0.17	0.34
% Harvested (bluegill)	4.3%	4.1%	58.6%	4.6%	no survey	10.3%	6.4%	no survey	no survey	6.1%	13.5%
Mean Weight (bluegill)	0.14	0.26	0.22	0.26	no survey	0.31	0.35	no survey	no survey	0.22	0.25
<b>Value of Fishery</b> (creel survey data - trip expenditures only)											
Any Sunfish	\$3,260	\$610	\$1,960	\$7,880	no survey	\$10,170	\$5,490	no survey	no survey	\$5,400	\$4,967

**Catfish, Boone Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Angling Pressure</b> (creel survey data - all catfish)											
Angler Hours	2,901	1,901	1,978	2,421	no survey	1,184	2,967	no survey	no survey	213	1,938
Angler Hours/Acre	0.6	0.4	0.4	0.5	no survey	0.3	0.7	no survey	no survey	0.0	0.4
<b>Fishing Success</b> (creel survey data)											
Catch Rate (channel cat)	0.18	0.16	0.21	0.15	no survey	0.35	0.27	no survey	no survey	0.0	0.19
Harvest Rate (channel cat)	0.17	0.16	0.20	0.11	no survey	0.14	0.17	no survey	no survey	0.0	0.14
% Harvested (channel cat)	50.1%	65.6%	77.9%	20.1%	no survey	31.3%	20.4%	no survey	no survey	46.5%	44.6%
Mean Weight (channel cat)	4.29	3.14	2.93	4.95	no survey	2.29	3.69	no survey	no survey	3.83	3.59
<b>Value of Fishery</b> (creel survey data - trip expenditures only)											
Any Catfish	\$5,010	\$4,040	\$4,270	\$5,980	no survey	\$1,390	\$3,840	no survey	no survey	\$280	\$3,544

**Shad, Boone Reservoir**

**Shad**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Density</b> (summer shad gill net data - geometric mean density)											
Gizzard Shad	26.1	25.9	23.9	8.9	9.0	5.8	11.6	6.3	6.9	8.0	13.2
Threadfin Shad	15.9	11.2	40.2	5.0	1.3	1.5	0.1	2.1	3.2	1.4	8.2
Alewife	2.4	2.4	3.3	7.3	3.2	9.4	28.2	5.5	7.1	2.9	7.2

**Habitat Enhancement, Boone Reservoir**

Type of Work	Details	Quantity	
		New	Renovated
Planted			
Rebrushed			3 sites, 2,498 trees
Checked and Refurbishe stake beds			
Rebrushed			
Added			
Installed			

**Water Quality Monitoring, Boone Reservoir**

Parameter	Sampling Period	Water Quality
Temperature	July to August	normal
Dissolved Oxyged	July to August	normal

## Cherokee Reservoir - 2014

### Description

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**Area:** 30,300 acres

**Shoreline:** 393 miles

**Counties:** Jefferson, Grainger, Hamblen, and Hawkins

**Full Pool Elevation (feet-msl):** ~1070

**Winter Pool Elevation (feet-msl):** ~1040

**Dam Completion:** 1941

### Summary:

### Lakewide Angling Summary

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	-	405,366	-	407,673	-	-	-	-	567,593	-
Angler Hours Per Acre	-	13.4	-	13.5	-	-	-	-	18.7	-
Angler Trips	-	74,377	-	78,461	-	-	-	-	88,384	-
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	-	\$852,750	-	\$972,470	-	-	-	-	\$2,846,760	-

**Black Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
All Black Bass (hrs)	-	181,976	-	189,452	-	-	-	-	358,306	-
(hrs/acre)	-	6.01	-	6.25	-	-	-	-	11.83	-
Any Black Bass (hrs)	-	946	-	702	-	-	-	-	19,757	-
(hrs/acre)	-	0.03	-	0.02	-	-	-	-	0.65	-
Largemouth Bass (hrs)	-	177,852	-	188,140	-	-	-	-	332,053	-
(hrs/acre)	-	5.87	-	6.21	-	-	-	-	10.96	-
Smallmouth Bass (hrs)	-	3,178	-	610	-	-	-	-	6,151	-
(hrs/acre)	-	0.10	-	0.02	-	-	-	-	0.20	-
Spotted Bass (hrs)	-	0	-	0	-	-	-	-	345	-
(hrs/acre)	-	0.00	-	0.00	-	-	-	-	0.01	-
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	-	\$523,450	-	\$709,440	-	-	-	-	\$1,974,960	-
Any Black Bass	-	\$6,320	-	\$0	-	-	-	-	\$55,890	-
Largemouth Bass	-	\$509,540	-	\$707,520	-	-	-	-	\$1,898,930	-
Smallmouth Bass	-	\$7,590	-	\$1,920	-	-	-	-	\$18,570	-
Spotted Bass	-	\$0	-	\$0	-	-	-	-	\$1,570	-



## Largemouth Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	5.60	4.53	8.00	6.67	3.47	3.73	-	-	5.60	3.73
<b>Density</b> (electrofishing)										
PSD	84	72	79	68	86	78	-	-	82	85
RSD (preferred)	52	47	55	33	44	36	-	-	41	53
CPUE (total)	74.4	61.3	53.6	60.8	58.7	79.2	-	-	47.5	62.1
CPUE ≥ Stock	68.8	56.8	45.6	54.1	55.2	75.5	-	-	36.3	58.4
CPUE ≥ MLL (15-inches)	36.0	26.7	25.1	17.6	24.5	26.9	-	-	17.1	29.6
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	87.3	89.5	88.9	89.1	87.6	82.0	-	-	86.2	76.8
Quality	93.1	89.7	93.6	93.6	93.3	85.3	-	-	88.2	82.2
Preferred	96.7	93.2	93.9	93.5	94.9	84.5	-	-	89.3	84.1
Memorable	89.6	88.2	94.3	91.7	84.1	92.3	-	-	89.8	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	-	0.74	-	0.62	-	-	-	-	0.72	-
Harvest Rate (intended)	-	0.01	-	0.01	-	-	-	-	0.15	-
% Released	-	98.7%	-	98.3%	-	-	-	-	76.7%	-
Mean Weight	-	2.37	-	2.34	-	-	-	-	2.96	-

## Smallmouth Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	0.00	0.00	0.53	0.00	0.00	0.00	-	-	0.00	0.53
<b>Density</b> (electrofishing)										
PSD	88	60	71	100	100	91	-	-	95	84
RSD (preferred)	65	50	71	100	100	73	-	-	73	64
CPUE (preferred)	0.8	0.5	0.3	0.8	0.8	6.4	-	-	5.3	5.3
CPUE (memorable)	1.6	0.8	0.8	0.8	0.5	2.1	-	-	1.9	2.1
CPUE (trophy)	0.5	0.0	0.3	0.0	0.0	0.0	-	-	0.0	0.0
CPUE (total)	5.7	4.5	2.4	1.6	1.3	8.8	-	-	9.9	12.3
CPUE ≥ Stock	5.7	4.5	1.9	1.6	1.3	8.8	-	-	9.9	11.7
CPUE ≥ Preferred	2.9	1.3	1.4	1.6	1.3	8.5	-	-	7.2	7.4
CPUE ≥ MLL (18-inches)	1.6	0.8	1.1	0.8	0.3	0.5	-	-	0.5	0.1
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	88.3	92.1	81.0	-	-	78.6	-	-	85.2	78.3
Quality	87.4	77.4	-	-	-	83.8	-	-	81.4	81.6
Preferred	91.6	95.2	87.1	90.4	89.0	82.5	-	-	82.2	78.4
Memorable	87.9	90.4	84.8	86.3	91.6	79.5	-	-	80.7	74.2
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	-	0.39	-	0.29	-	-	-	-	0.72	-
Harvest Rate (intended)	-	0.00	-	0.00	-	-	-	-	0.15	-
% Released	-	98.6%	-	98.8%	-	-	-	-	76.7%	-
Mean Weight	-	3.19	-	1.74	-	-	-	-	2.96	-

**Spotted Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	0.00	0.00	0.00	0.80	0.27	0.00	-	-	1.33	0.27
<b>Density</b> (electrofishing)										
PSD	83	46	30	56	77	71	-	-	66	59
RSD (preferred)	17	8	4	9	19	29	-	-	0	18
CPUE (total)	8.0	3.5	7.2	9.3	8.5	9.3	-	-	9.1	4.8
CPUE $\geq$ Stock	8.0	3.5	7.2	8.5	8.3	9.3	-	-	7.8	4.5
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	94.1	93.5	100.7	99.4	104.0	89.5	-	-	98.9	85.2
Quality	100.4	97.5	106.7	99.5	105.4	93.8	-	-	95.5	89.4
Preferred	102.9	100.0	110.2	100.7	102.8	92.1	-	-	-	88.9
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	-	-	-	-	-	-	-	-	0	-
Harvest Rate (intended)	-	-	-	-	-	-	-	-	0	-
% Released	-	88.8%	-	92%	-	-	-	-	78%	-
Mean Weight	-	1.05	-	1	-	-	-	-	2	-

**Black Crappie**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	0.20	0.20	0.50	0.10	0.09	-	0.41	0.31	0.07	0.58
<b>Density</b> (trap netting)										
PSD	80	90	83	85	89	-	69	96	95	77
RSD (preferred)	32	49	42	44	62	-	13	67	75	57
CPUE (total)	3.7	5.3	6.5	1.9	2.1	-	7.1	5.6	2.9	2.8
CPUE ≥ Stock	3.5	5.1	6.0	1.8	2.0	-	6.7	5.3	2.8	2.2
CPUE ≥ MLL (10-inches)	1.3	2.5	2.5	0.8	1.2	-	0.8	3.3	2.0	1.2
<b>Growth</b> (trap netting)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (trap netting)										
Stock	92.3	100.3	97.8	102.5	94.2	-	100.1	91.3	97.7	75.1
Quality	99.7	97.9	98.5	99.0	103.3	-	101.1	94.2	90.5	92.9
Preferred	96.3	95.9	96.7	92.8	93.9	-	96.9	97.7	92.4	88.9
Memorable	93.7	94.0	97.6	94.3	92.0	-	95.2	95.8	93.7	87.9
<b>Mortality</b> (trap netting)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
		BC	BNBC	BNBC	BNBC	BNBC			BNBC	BC / BNBC
#	0	56,071	72,775	62,582	139,068	103,099	0	0	41,937	116,004
#/Acre	0.0	1.9	2.4	2.1	4.6	3.4	0.0	0.0	1.4	3.8
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	-	66,884	-	83,486	-	-	-	-	41,750	-
Angler Hours/Acre	-	2.2	-	2.8	-	-	-	-	1.4	-
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	-	1.58	-	1.17	-	-	-	-	2.36	-
Harvest Rate (any crappie)	-	0.51	-	0.52	-	-	-	-	0.86	-
% Released (black crappie)	-	69.4%	-	55.5%	-	-	-	-	66.2%	-
Mean Weight (black crappie)	-	0.78	-	0.77	-	-	-	-	0.45	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	-	\$16,870	-	\$35,160	-	-	-	-	\$158,520	-

## Striped Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (gill netting)										
PSD	79	86	-	69	83	98	-	92	-	-
RSD (preferred)	13	43	-	-	-	-	-	23	-	-
CPUE (total)	2.7	1.2	-	2.2	12.9	5.6	-	2.2	-	-
CPUE ≥ Stock	2.7	1.2	-	2.2	12.9	5.6	-	2.2	-	-
CPUE ≥ 15-inches	2.7	1.2	-	2.2	12.9	5.6	-	2.2	-	-
<b>Growth</b> (gill netting)										
Length Age-2	17.9	-	17.7	17.2	18.2	-	-	-	-	-
Length Age-3	23.8	-	22.0	23.2	23.2	-	-	-	-	-
<b>Condition</b> (gill netting)										
Stock	103.2	108.1	-	87.5	107.2	94.0	-	113.3	-	-
Quality	102.1	94.1	-	86.6	98.7	94.0	-	101.3	-	-
Preferred	93.6	74.6	-	-	-	-	-	95.1	-	-
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Mortality</b> (gill netting)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	133,646	168,434	151,818	0	0	72,039	72,997	61,472	92,180	25,399
#/Acre	4.4	5.6	5.0	0.0	0.0	2.4	2.4	2.0	3.0	0.8
<b>Angling Pressure</b> (creel)										
Angler Hours	-	44,587	-	23,301	-	-	-	-	87,431	-
Angler Hours/Acre	-	1.5	-	0.8	-	-	-	-	2.9	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	-	0.11	-	0.11	-	-	-	-	0.33	-
Harvest Rate (intended)	-	0.05	-	0.05	-	-	-	-	0.15	-
% Released	-	62.3%	-	76.0%	-	-	-	-	52.8%	-
Mean Weight	-	12.49	-	8.51	-	-	-	-	7.19	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Striped Bass	-	\$165,590	-	\$73,040	-	-	-	-	\$408,570	-

## Hybrid Striped Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (gill netting)										
PSD	100	100	-	100	100	100	-	100	-	-
RSD (preferred)	100	95	-	99	100	100	-	99	-	-
CPUE (total)	27.7	14.3	-	15.7	17.0	11.3	-	81.8	-	-
CPUE ≥ Stock	27.7	14.3	-	15.7	17.0	11.3	-	81.8	-	-
CPUE ≥ 15-inches	27.3	14.0	-	15.7	17.0	11.3	-	81.0	-	-
<b>Growth</b> (gill netting)										
Length Age-2	18.0	16.9	18.8	18.0	17.2	-	-	-	-	-
Length Age-3	20.5	21.1	20.0	20.7	20.7	-	-	-	-	-
<b>Condition</b> (gill netting)										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	99.8	95.4	-	-	-	-	-	105.7	-	-
Preferred	100.3	96.3	-	101.8	102.5	100.2	-	104.6	-	-
Memorable	102.0	93.3	-	99.1	100.8	97.9	-	106.4	-	-
<b>Mortality</b> (gill netting)										
Total Mortality	-	-	-	32.0%	-	-	-	-	-	-
<b>Stocking</b>										
#	31,950	56,882	55,006	85,382	85,741	82,906	44,160	43,700	22,512	53,997
#/Acre	1.1	1.9	1.8	2.8	2.8	2.7	1.5	1.4	0.7	1.8
<b>Angling Pressure</b> (creel)										
Angler Hours	-	40,713	-	44,202	-	-	-	-	-	-
Angler Hours/Acre	-	1.3	-	1.5	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	-	0.48	-	0.61	-	-	-	-	-	-
Harvest Rate (intended)	-	0.18	-	0.21	-	-	-	-	-	-
% Released	-	67.7%	-	70.4%	-	-	-	-	-	-
Mean Weight	-	5.18	-	6.63	-	-	-	-	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Hybrid Striped Bass	-	\$107,330	-	\$114,290	-	-	-	-	-	-

**Walleye**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Stocking</b>										
#	60,089	75,629	146,959	168,535	79,420	158,512	92,220	46,375	42,504	109,940
#/Acre	2.0	2.5	4.9	5.6	2.6	5.2	3.0	1.5	1.4	3.6
<b>Angling Pressure</b> (creel)										
Angler Hours	-	6,805	-	3,390	-	-	-	-	931	-
Angler Hours/Acre	-	0.2	-	0.1	-	-	-	-	0.0	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	-	0.78	-	0.27	-	-	-	-	0.00	-
Harvest Rate (intended)	-	0.32	-	0.07	-	-	-	-	0.00	-
% Released	-	58.0%	-	89.1%	-	-	-	-	0.0%	-
Mean Weight	-	2.47	-	2.41	-	-	-	-	1.66	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Walleye	-	\$7,670	-	\$0	-	-	-	-	\$1,870	-

**Saugeye**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Stocking</b>										
#	0	0	0	0	0	0	0	1,600	104,322	195,020
#/Acre	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	3.4	6.4
<b>Angling Pressure</b> (creel)										
Angler Hours	-	-	-	-	-	-	-	-	-	-
Angler Hours/Acre	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	-	-	-	-	-	-	-	-	-	-
Harvest Rate (intended)	-	-	-	-	-	-	-	-	-	-
% Released	-	-	-	-	-	-	-	-	-	-
Mean Weight	-	-	-	-	-	-	-	-	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Walleye	-	-	-	-	-	-	-	-	-	-

## Sunfish

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all sunfish)	-	4,069	-	4,361	-	-	-	-	17,537	-
Angler Hours/Acre	-	0.1	-	0.1	-	-	-	-	0.6	-
<b>Fishing Success</b> (creel)										
Catch Rate (any sunfish)	-	1.81	-	1.86	-	-	-	-	1.45	-
Harvest Rate (any sunfish)	-	0.87	-	0.75	-	-	-	-	0.54	-
% Released (bluegill)	-	57.0%	-	52.9%	-	-	-	-	64.9%	-
Mean Weight (bluegill)	-	0.25	-	0.26	-	-	-	-	0.18	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Sunfish	-	\$2,750	-	\$3,170	-	-	-	-	\$40,870	-

## Catfish

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all catfish)	-	36,195	-	39,978	-	-	-	-	14,782	-
Angler Hours/Acre	-	1.2	-	1.3	-	-	-	-	0.5	-
<b>Fishing Success</b> (creel)										
Catch Rate (any catfish)	-	0.78	-	0.64	-	-	-	-	0.54	-
Harvest Rate (any catfish)	-	0.52	-	0.41	-	-	-	-	0.33	-
% Released (channel)	-	38.2%	-	44.1%	-	-	-	-	45.8%	-
Mean Weight (channel)	-	1.82	-	1.57	-	-	-	-	1.37	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Catfish	-	\$23,160	-	\$24,060	-	-	-	-	\$75,770	-

## Shad

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (Summer Shad Gill Netting) (geometric means)										
Alewife CPUE	0.1	0.4	0.4	0.4	1.5	2.8	-	-	-	1.0
Gizzard CPUE	1.7	3.3	3.3	1.7	4.1	5.5	-	-	-	2.5
Threadfin CPUE	1.6	3.0	2.0	4.7	2.3	3.1	-	-	-	1.4



**Habitat Enhancement**

Type of Work	Details	Quantity	
		New	Renovated
none			

**Water Quality Monitoring**

Parameter	Sampling Period	Water Quality
Temperature	July - August	Normal
Dissolved Oxygen	July - August	Above Average
PH	July - August	Normal
Conductivity	July - August	Normal

## Douglas Reservoir

### Description

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<b>Surface Area:</b> 30,400 acres	<b>Shoreline Distance:</b> 127 miles
<b>Counties:</b> Jefferson, Sevier, Cocke	<b>Drainage Area:</b> 4541 square miles
<b>Full Pool Elevation:</b> 994 feet above mean sea level	<b>Mean Annual Fluctuation:</b> 50 feet
<b>Maximum Depth:</b> 129 feet	<b>Thermocline Depth:</b> 23 feet
<b>Mean Chlorophyll (Forebay):</b> 6.8 parts per million	<b>Shoreline Development:</b> 17%
<b>Trophic Status (Forebay):</b> Mesotrophic	<b>Trophic Index, Carlson (1977):</b> 49.3
<b>Hydraulic Retention Time:</b> 105 days	<b>Reservoir Age:</b> 71 years (dam closure 1943)
<b>Total Fishing Effort:</b> 581,862 hours	<b>Total Value by Anglers:</b> \$2,332,710

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### Summary:

#### Electrofishing

The 2014 smallmouth bass catch rates were about average, with a CPUE of 29 fish/hour. We also saw a very strong 2013 year class, in which almost half of the fish collected (48%) were 10-inches and under. Large number of smallmouth bass sampled under 10-inches, the last few years, should help smallmouth populations remain stable and fishing should continue to improve. The relative weights for smallmouth bass were normal for Douglas Reservoir.

The 2014 largemouth bass catch rates were a little below average, with a CPUE of 127 fish/hour. As is normal with Douglas, a large percentage (66.5%) of fish occurred in the 6 to 12-inch size range. This large number of small fish in the largemouth bass population will help to ensure a stable and quality fishery for the next several years. The relative weights for largemouth were also normal for Douglas Reservoir.

#### Trap Netting

Trap nets were used to sample Douglas Reservoir crappie populations in early November 2014. These nets were set from just above Nina Creek to Flat Creek. The TWRA collected a total of 489 black crappie, 935 white crappie, and 1 black-nose black crappie in 90 trap net sets.

About 48% of the black crappie collected were between 6 and 10 inches, which indicated that there was natural reproduction in 2013. About 43% of the black crappie collected were less than 5 inches, which indicated that there was natural reproduction of black crappie in 2014. About 96% of the white crappie collected were less than 5-inches, which indicated good natural reproduction of white crappie as well.

This is extremely good news, indicating successful crappie reproduction on Douglas Reservoir the last three years. Good overall numbers of crappie collected, combined with the large numbers of young of the year crappie, indicate that the Douglas crappie population continues to show good signs of recovery.

**Gill Netting**

A total of 23 sauger, 39 walleye, and 132 white bass were collected in six experimental gill nets on Douglas Reservoir. The gill nets were set from Indian Creek to Muddy Creek.

The catch rates for sauger were slightly below average at 3.8 fish per net night. There was a decent percentage collected under 12-inches. This would indicate that there was some survival of fish that were spawned in 2014. We hope that stocking efforts combined with the current (1 fish over 16-inches) regulation, which is in place to help protect adult female sauger, will help sauger populations recover on Douglas Reservoir.

The catch rates for walleye were slightly above average at 6.5 fish per net night. The good news for the walleye population is that there was also a good percentage collected under 12-inches (28%). This would indicate another successful spawning year for Douglas Reservoir walleye. The number of walleye collected over the 15-inch size limit would indicate that there will be plenty of keeper size fish for anglers in 2014.

The overall number of white bass collected was above average for Douglas Reservoir. This is good news and should mean that there will be plenty of white bass for anglers to catch in 2015.

**Shad Netting**

There was no shad netting conducted on Douglas Reservoir in 2014.

**Habitat Enhancement**

There was no habitat enhancement work conducted on Douglas Reservoir in 2014.

**Water Quality**

Water quality sampling was conducted at two sites on Douglas Reservoir during the months of July, August, and September. These samples were normal for Douglas Reservoir.

**Lakewide Angling Summary**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Angling Pressure										
Angler Hours	558,748	no survey	567,005	no survey	no survey	no survey	no survey	706,357	no survey	581,862
Angler Hours Per Acre	18.2	no survey	18.5	no survey	no survey	no survey	no survey	23.0	no survey	19.1
Angler Trips	109,753	no survey	109,325	no survey	no survey	no survey	no survey	126,943	no survey	98,479
Value of Fishery (angler expenditures creel)										
All Species	\$949,010	no survey	\$1,348,060	no survey	no survey	no survey	no survey	\$3,961,800	no survey	\$2,332,710

**Black Bass, Douglas Reservoir**

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Angling Pressure (creel survey data)												
All Black Bass	(hrs)	189,271	N o	204,725	N o	N o	N o	N o	379,812	N o	179,745	158,926
	(hrs/acre)	6.2		6.7					12		6	7.8
Any Black Bass	(hrs)	330	S u r v e y	116,281	S u r v e y	S u r v e y	S u r v e y	S u r v e y	460	S u r v e y	51,624	42,174
	(hrs/acre)	0.0		3.8					0		2	1.4
Largemouth Bass	(hrs)	188,941	S u r v e y	88,444	S u r v e y	S u r v e y	S u r v e y	S u r v e y	378,500	S u r v e y	128,121	196,002
	(hrs/acre)	6.2		2.9					12		4	6.4
Smallmouth Bass	(hrs)	0	S u r v e y	0	S u r v e y	S u r v e y	S u r v e y	S u r v e y	8,522	S u r v e y	0	2,131
	(hrs/acre)	0.0		0.0					0		0	0.1
Spotted Bass	(hrs)	0	S u r v e y	0	S u r v e y	S u r v e y	S u r v e y	S u r v e y	0	S u r v e y	0	0
	(hrs/acre)	0.0		0.0					0		0	0.0
Tournaments (BITE program)												
# Tournaments (BITE)		10	9	4	3	3	No Survey	No Survey	No Survey	No Survey	No Survey	5.8
Pounds/Angler Day (BITE)		4.96	4.89	4.29	3.73	3.49	No Survey	No Survey	No Survey	No Survey	No Survey	4.27
Bass/Angler Day (BITE)		3.00	3.03	2.28	2.17	1.84						2.46
Value of Fishery (creel survey data - trip expenditures)												
All Black Bass		\$698,920	No Survey	\$1,013,420	No Survey	No Survey	No Survey	No Survey	\$2,688,140	No Survey	\$975,610	\$856,170
Any Black Bass		\$960		\$610,600					\$670		\$249,780	\$305,780
Largemouth Bass		\$697,960	No Survey	\$402,820	No Survey	No Survey	No Survey	No Survey	\$2,627,110	No Survey	\$725,830	\$550,390
Smallmouth Bass		\$0		\$0					\$60,360		\$0	\$0
Spotted Bass		\$0		\$0					\$0		\$0	\$0

**Largemouth Bass, Douglas Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Recruitment (electrofishing data - CPUE = # fish/hour)											
Age-1 CPUE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	no survey	N/A	N/A
Substock CPUE	26.9	17.3	42.6	45.7	64.9	84.0	37.1	32.6	no survey	33.1	42.7
Density (electrofishing data - CPUE = # fish/hour)											
PSD	62%	65%	44%	68%	53%	52%	69%	58%	no survey	56%	0.6
RSD - Preferred	21%	18%	10%	13%	12%	16%	18%	26%	no survey	23%	0.2
CPUE	196.0	121.3	132.3	153.7	185.7	244.9	198.6	134.6	no survey	126.6	166.0
CPUE ≥ Stock	169.1	104.1	89.7	108.0	120.9	160.9	161.4	102.0	no survey	93.4	123.3
CPUE ≥ MSL	N o M i n i m u m S i z e L i m i t										
Growth (electrofishing data)											
Mean TL at Age-1 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mean TL at Age-3 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Relative Weight (electrofishing data)											
Stock - Quality	92.0	85.9	92.0	87.7	90.5	87.3	87.1	85.8	no survey	81.5	87.8
Quality - Preferred	91.8	88.1	88.5	90.3	90.1	89.7	89.6	90.4	no survey	88.8	89.7
Preferred - Memorable	96.8	91.2	93.0	91.0	91.4	90.9	88.4	96.5	no survey	90.1	92.1
Memorable - Trophy	111.3	100.7	98.8	102.4	103.2	111.0	97.1	none	no survey	98.5	102.9
Trophy	none	none	none	none	none	none	none	none	no survey	none	none
Mortality (electrofishing data)											
Total Mortality	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fishing Success (creel survey data)											
Catch Rate	0.99	No	1.20	No	No	No	No	0.86	No	0.58	0.91
Harvest Rate	0.03		0.04							0.25	0.11
Percent Harvested	5.2%	Survey	6.1%	Survey	Survey	Survey	Survey	28.7%	Survey	19.5%	14.9%
Mean Weight (pounds)	1.33		1.45							2.25	2.91

**Smallmouth Bass, Douglas Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (electrofishing data - CPUE = # fish/hour)											
Age-1 CPUE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.8	N/A	N/A
Substock CPUE	0.0	0.0	0.0	0.0	0.0	1.4	5.1	5.2	2.1	0.6	1.4
<b>*Density</b> (electrofishing data - CPUE = # fish/hour)											
PSD	58%	61%	29%	46%	66%	47%	31%	31%	80%	59%	51%
RSD - Preferred	44%	36%	9%	30%	34%	19%	13%	16%	55%	33%	29%
CPUE	15.5	17.1	19.8	44.9	18.7	66.4	41.6	51.8	37.4	29.3	34.2
CPUE ≥ Stock	15.5	17.1	19.8	44.9	18.7	65.1	36.4	46.5	22.6	28.6	31.5
CPUE ≥ MSL (20")	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.6	0.0	0.2
<b>Growth</b> (electrofishing data)											
Mean TL at Age-1 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	134	N/A	N/A
Mean TL at Age-3 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	332	N/A	N/A
<b>Relative Weight</b> (electrofishing data)											
Stock - Quality	89.4	81.1	82.8	86.9	87.6	81.4	78.1	80.6	83.8	80.3	83.2
Quality - Preferred	83.0	84.0	80.9	86.1	83.3	84.1	76.5	79.9	85.3	80.4	82.4
Preferred - Memorable	81.8	89.6	79.8	87.0	88.4	82.3	69.1	84.1	87.0	82.3	83.1
Memorable - Trophy	91.7	91.7	71.0	87.1	88.0	82.6	75.8	78.3	88.3	80.5	83.5
Trophy	none	none	none	none	none	none	none	none	none	none	none
<b>Mortality</b> (electrofishing data)											
Total Mortality	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	49%	N/A	N/A
<b>Stocking</b>											
# per Acre	0.3	0.1	0.0	0.0	0.3	0.0	0.0	0.1	0.3	0.3	0.1
<b>Fishing Success</b> (creel survey data)											
Catch Rate	0.00	No	0.05	No	No	No	No	0.00	No	0.03	0.03
Harvest Rate	0.00		0.00					0.01		0.00	0.00
Percent Harvested	0.8%	Survey	0.0%	Survey	Survey	Survey	Survey	36.0%	Survey	8.1%	0.4%
Mean Weight (pounds)	2.00		N/A					3.16		3.00	2.00

\* 2004 - present data was collected from targetted smallmouth bass sample. Previous data was collected from standardized springtime electrofishing samples.

**White Crappie, Douglas Reservoir**

White Crappie											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Recruitment (trap net data) - CPUE = # fish/ net night)											
Age-0 CPUE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Substock CPUE	1.1	0.1	0.0	0.0	0.0	0.4	1.3	0.0	0.1	10.3	1.3
Density (trap net data) - CPUE = # fish/ net night)											
PSD	91%	100%	100%	100%	100%	9%	35%	65%	93%	89%	78%
RSD - Preferred	67%	75%	40%	67%	100%	0%	23%	40%	80%	81%	57%
CPUE	1.5	0.2	0.2	0.0	0.0	0.6	1.5	0.3	0.4	10.7	1.5
CPUE ≥ Stock	0.4	0.1	0.2	0.0	0.0	0.1	0.3	0.2	0.3	0.4	0.2
CPUE ≥ MSL (10")	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.1
Growth (trap net data)											
Mean TL at Age-1 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mean TL at Age-3 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Relative Weight (trap net data)											
Stock - Quality	91.0	none	none	none	none	88.0	83.6	84.7	83.1	115.0	90.9
Quality - Preferred	93.7	105.7	97.4	97.8	none	100.0	99.9	100.7	104.7	105.8	100.6
Preferred - Memorable	95.5	99.3	101.3	92.4	none	none	103.4	97.1	100.1	95.9	98.1
Memorable - Trophy	94.8	93.7	112.8	none	51.3	none	83.1	none	97.8	91.5	89.3
Trophy	none	none	none	none	none	none	none	none	none	none	none
Mortality (trap net data)											
Total Mortality	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Stocking											
# per Acre	0.5	0.0	0.5	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.3
Angling Pressure (creel survey data - any crappie)											
Angler Hours	231,877		227,504					152,524		268,444	220,087
Angler Hours/Acre	7.6		7.5					5.0		8.8	7.2
Fishing Success (creel survey data)											
Catch Rate	1.68	No	1.57	No	No	No	No	2.58	No	2.36	2.05
Harvest Rate	0.69		0.67					0.68		1.43	0.87
Percent Harvested	36.5%	Survey	39.9%	Survey	Survey	Survey	Survey	30.6%	Survey	61.8%	42.2%
Mean Weight (pounds)	0.68		0.64					0.48		0.55	0.59
Value of Fishery (creel survey data - trip expenditures)											
Any Crappie	\$171,420		\$229,760					\$407,204		\$655,830	\$366,054

**Black Crappie, Douglas Reservoir**

Black Crappie																	
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean						
Recruitment (trap net data) - CPUE = # fish/ net night)																	
Age-0 CPUE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						
Substock CPUE	0.6	0.4	0.1	0.1	0.1	0.9	1.9	0.0	3.3	2.1	1.0						
Density (trap net data) - CPUE = # fish/ net night)																	
PSD	85%	98%	100%	82%	86%	77%	65%	91%	92%	80%	86%						
RSD - Preferred	42%	66%	63%	58%	31%	41%	29%	32%	61%	46%	47%						
CPUE	8.0	3.6	2.1	1.3	3.4	3.4	7.8	3.9	7.0	5.4	4.6						
CPUE ≥ Stock	7.4	3.2	2.0	1.2	3.3	2.5	6.0	3.9	3.7	3.4	3.7						
CPUE ≥ MSL (10")	2.3	1.8	1.1	0.6	0.7	0.9	1.4	0.8	1.8	1.2	1.3						
Growth (trap net data)																	
Mean TL at Age-1 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						
Mean TL at Age-3 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						
Relative Weight (trap net data)																	
Stock - Quality	94.2	113.1	none	105.8	110.2	87.9	81.6	93.9	101.9	90.1	97.6						
Quality - Preferred	97.4	106.2	107.2	98.7	105.4	103.4	94.5	94.7	97.0	103.6	100.8						
Preferred - Memorable	95.2	100.7	101.2	97.7	98.3	96.7	96.5	91.4	94.8	95.2	96.8						
Memorable - Trophy	93.5	90.1	95.1	93.6	95.2	102.6	93.9	89.3	83.7	91.3	92.8						
Trophy	none	none	none	none	none	none	none	none	none	none	none						
Mortality (trap net data)																	
Total Mortality	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						
Stocking																	
# per Acre	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.5						
Angling Pressure (creel survey data - any crappie)																	
Angler Hours	231,877	No   Survey	227,504	No	No	No	No	152,524	No	268,444	220,087						
Angler Hours/Acre	7.6		7.5					5.0		8.8	7.2						
Fishing Success (creel survey data)																	
Catch Rate	0.12		0.31					No  Survey		No	No	No	0.18	No	0.15	0.19	
Harvest Rate	0.06		0.18										0.07		0.11	0.11	
Percent Harvested	47.7%	55.7%	47.1%	76.3%	56.7%												
Mean Weight (pounds)	0.74	0.81	0.49	0.62	0.665												
Value of Fishery (creel survey data - trip expenditures)																	
Any Crappie	\$171,420		\$229,760					\$407,204		\$655,830	\$366,054						



**Sauger, Douglas Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean	
Recruitment (winter gill net data)												
Substock CPUE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Density (winter gill net data - CPUE = # fish/net night)												
PSD	93%	74%	100%	65%	85%	100%	91%	91%	70%	96%	87%	
RSD - Preferred	47%	37%	37%	36%	70%	79%	27%	29%	70%	74%	51%	
CPUE	13.0	11.3	5.8	9.4	4.7	1.7	1.8	5.7	3.8	3.8	6.1	
CPUE ≥ Stock	13.0	11.3	5.8	9.4	4.7	1.7	1.8	5.7	3.8	3.8	6.1	
CPUE ≥ MSL (16")*	N/A	N/A	N/A	2.1	2.7	0.5	0.2	0.5	2.0	1.3	1.3	
Growth (winter gill net data)												
Mean TL at Age-1 (mm)	333	342	360	370	386	392	n/a	343	406	390	369	
Mean TL at Age-3 (mm)	none	409	367	448	520	none	n/a	397	397	433	424	
Relative Weight (winter gill net data)												
Stock - Quality	87.1	88.7	none	91.8	92.2	none	88.3	81.9	82.6	93.5	88.3	
Quality - Preferred	92.4	90.9	95.1	99.0	93.6	94.2	95.5	89.3	none	94.0	93.8	
Preferred - Memorable	93.0	96.2	92.8	95.5	96.4	96.5	100.9	95.4	96.9	97.5	96.1	
Memorable - Trophy	none	none	none	96.3	100.8	none	none	none	none	none	98.5	
Trophy	none	none	none	none	none	none	none	none	none	none		
Mortality (winter gill net data)												
Total Mortality	N/A	N/A	N/A	N/A	52.00%	N/A	N/A	N/A	N/A	N/A	52.00%	
Stocking												
# per Acre	1.7	0.9	2.2	2.0	1.8	0.0	6.4	0.0	3.0	0.0	1.8	
Angling Pressure (creel survey data - sauger data only)												
Angler Hours	11,140	No	15,001	No	No	No	No	1,529	No	2,375	7,511	
Angler Hours/Acre	0.37		0.49							0.05	0.07	0.25
Fishing Success (creel survey data - sauger data only)												
Percent Harvested	17.4%		21.3%					62.8%		81.0%	45.6%	
Mean Weight (pounds)	0.92		1.27							1.46	1.59	1.31
Value of Fishery (creel survey data - trip expenditures)												
All Sanders	\$24,260	Survey	\$33,040	Survey	Survey	Survey	Survey	\$245,310	Survey	\$166,090	\$117,175	
Sauger Data Only	\$13,150		\$28,030							\$21,520	\$8,840	\$17,885

\*MSL changed to 1 over 16-inches in 2008

**Walleye, Douglas Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (winter gill net data)											
Substock CPUE	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
<b>Density</b> (winter gill net data - CPUE = # fish/net night)											
PSD	100%	27%	86%	57%	22%	35%	79%	33%	52%	54%	55%
RSD - Preferred	38%	9%	4%	11%	0%	1%	0%	5%	4%	0%	7%
CPUE	1.1	6.4	4.7	4.0	4.6	16.2	2.5	9.5	4.2	6.5	6.0
CPUE ≥ Stock	1.1	6.3	4.7	4.0	4.6	16.2	2.3	9.5	4.2	6.5	5.9
CPUE ≥ MSL (15")	1.1	1.7	4.4	2.3	1.0	5.2	1.7	3.0	2.2	3.0	2.6
<b>Growth</b> (winter gill net data)											
Mean TL at Age-1 (mm)			402	N/A	429	414	409	404	403	407	410
Mean TL at Age-3 (mm)			458	450	N/A	none	none	537	480	427	470
<b>Relative Weight</b> (winter gill net data)											
Stock - Quality	none	91.2	87.1	91.7	88.3	88.8	89.8	86.6	85.0	94.1	89.2
Quality - Preferred	84.6	87.3	84.2	88.4	87.8	86.8	88.3	87.0	89.5	91.2	87.5
Preferred - Memorable	87.7	93.7	80.6	94.3	none	92.8	none	88.0	80.7	none	88.3
Memorable - Trophy	none	none	none	97.2	none	none	none	none	none	none	97.2
Trophy	none	none	none	none	none	none	none	none	none	none	none
<b>Mortality</b> (winter gill net data)											
Total Mortality	N/A	N/A	N/A	N/A	80.00%	N/A	N/A	N/A	N/A	N/A	80.00%
<b>Stocking</b>											
# per Acre	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Angling Pressure</b> (creel survey data - walleye data only)											
Angler Hours	9,499		5,178					63,435		43,028	30,285
Angler Hours/Acre	0.31	No	0.17	No	No	No	No	2.08	No	1.41	1.00
<b>Fishing Success</b> (creel survey data - walleye data)											
Percent Harvested	14.3%		21.6%					76.3%		74.7%	46.7%
Mean Weight (pounds)	1.36		1.89					1.88		1.79	1.73
<b>Value of Fishery</b> (creel survey data - trip expenditures)											
All Sanders	\$24,260	Survey	\$33,040	Survey	Survey	Survey	Survey	\$245,310	Survey	\$166,090	\$117,175
Walleye Data Only	\$11,110		\$5,010					\$223,790		\$157,270	\$99,295

**Sunfish, Douglas Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Angling Pressure</b> (creel survey data - any sunfish)											
Angler Hours	* 26,311	N	31,338	N	N	N	N	73,120	N	4,976	33,936
Angler Hours/Acre	0.87	^	1.03	o	o	o	o	2.40	o	0.16	1.12
<b>Fishing Success</b> (creel survey data - bluegill only)											
Catch Rate (bluegill)	not reported	S	5.23	S	S	S	S	2.42	S	0.00	2.55
Harvest Rate (bluegill)	not reported	u	3.32	u	u	u	u	1.18	u	0.00	1.50
% Harvested (bluegill)	not reported	r	55.5%	r	r	r	r	38.6%	r	75.0%	56.4%
Mean Weight (bluegill)	not reported	v	0.28	v	v	v	v	0.28	v	0.07	0.21
<b>Value of Fishery</b> (creel survey data - trip expenditures)											
Any Sunfish	\$5,970	y	\$12,640	y	y	y	y	\$73,120	y	\$5,690	\$24,355

\* Bluegill only

**Catfish, Boone Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Angling Pressure</b> (creel survey data - any catfish)											
Angler Hours	46,630	N	46,155	N	N	N	N	24,540	N	3,835	30,290
Angler Hours/Acre	1.53	^	1.52	o	o	o	o	0.80	o	0.80	1.00
<b>Fishing Success</b> (creel survey data)											
Catch Rate (channel cat)	0.93	S	0.93	S	S	S	S	0.34	S	0.00	0.55
Harvest Rate (channel cat)	0.63	u	0.61	u	u	u	u	0.21	u	0.00	0.36
% Harvested (channel cat)	63.9%	r	62.5%	r	r	r	r	80.6%	r	27.0%	58.5%
Mean Weight (channel cat)	1.75	v	1.66	v	v	v	v	3.37	v	1.61	2.0975
<b>Value of Fishery</b> (creel survey data - trip expenditures)											
Any Catfish	\$25,100	y	\$23,200	y	y	y	y	\$44,710	y	\$101,500	\$48,628

**Shad, Douglas Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Density</b> (summer shad gill net data - geometric mean density)											
Gizzard Shad	No Survey	No Survey	19.5056	19.51	7.73984	No Survey	No Survey	No Survey	No Survey	No Survey	15.59
Threadfin Shad	No Survey	No Survey	91.4348	42.75	10.72	No Survey	No Survey	No Survey	No Survey	No Survey	48.30
Alewife			0	0.00	0						0.00

**Habitat Enhancement, Douglas Reservoir**

Type of Work	Details	Quantity	
		New	Renovated
Planted	N/A		
Rebrushed	N/A		
Checked and Refurbishe stake beds	N/A		
Rebrushed	N/A		
Added	N/A		
Installed	N/A		

**Water Quality Monitoring, Douglas Reservoir**

Parameter	Sampling Period	Water Quality
Temperature	July to September	normal
Dissolved Oxygen	July to September	normal

## Fort Loudoun Reservoir - 2014

### Description

**Area:** 14,600 acres

**Shoreline:** 379 miles

**Counties:** Knox, Loudon, Blount

**Full Pool Elevation (feet-msl):** ~813

**Winter Pool Elevation (feet-msl):** ~807

**Dam Completion:** 1943

### Summary:

### Lakewide Angling Summary

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	227,239	-	-	197,702	220,585	-	-	152,819	-	-
Angler Hours Per Acre	15.6	-	-	13.5	15.1	-	-	10.5	-	-
Angler Trips	35,971			43,406	49,304			31,611		-
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	\$574,090	-	-	\$806,600	\$823,930	-	-	\$559,990	-	-

**Black Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
All Black Bass (hrs)	103,556	-	-	95,230	93,323	-	-	65,110	-	-
All Black Bass (hrs/acre)	7.09	-	-	6.52	6.39	-	-	4.46	-	-
Any Black Bass (hrs)	18,649	-	-	94,694	78,936	-	-	457	-	-
Any Black Bass (hrs/acre)	1.28	-	-	6.49	5.41	-	-	0.03	-	-
Largemouth Bass (hrs)	79,624	-	-	0	13,677	-	-	63,284	-	-
Largemouth Bass (hrs/acre)	5.45	-	-	0.00	0.94	-	-	4.33	-	-
Smallmouth Bass (hrs)	5,283	-	-	536	710	-	-	1,369	-	-
Smallmouth Bass (hrs/acre)	0.36	-	-	0.04	0.05	-	-	0.09	-	-
Spotted Bass (hrs)	0	-	-	0	0	-	-	0	-	-
Spotted Bass (hrs/acre)	0.00	-	-	0.00	0.00	-	-	0.00	-	-
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	\$437,060	-	-	\$490,470	\$397,170	-	-	\$313,430	-	-
Any Black Bass	\$63,990	-	-	\$487,630	\$386,360	-	-	\$1,990	-	-
Largemouth Bass	\$313,540	-	-	\$0	\$6,890	-	-	\$306,800	-	-
Smallmouth Bass	\$24,430	-	-	\$2,840	\$3,920	-	-	\$4,640	-	-
Spotted Bass	\$35,100	-	-	\$0	\$0	-	-	\$0	-	-

**Largemouth Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	25.00	2.00	16.67	22.00	15.20	4.33	-	-	3.60	0.40
<b>Density</b> (electrofishing)										
PSD	94	60	71	51	64	72	-	-	65	79
RSD (preferred)	23	18	19	16	16	23	-	-	29	44
CPUE (total)	114.3	66.3	97.0	162.0	104.0	92.7	-	-	44.8	43.6
CPUE ≥ Stock	89.3	64.3	80.3	140.0	88.8	88.4	-	-	41.2	43.2
CPUE ≥ MLL (14-inches)	32.3	17.0	23.7	36.0	24.8	28.0	-	-	16.8	22.8
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	85.3	85.5	86.3	95.1	91.3	84.6	-	-	87.2	80.7
Quality	87.8	87.3	89.5	94.3	91.9	85.8	-	-	90.2	85.0
Preferred	91.5	89.6	91.7	96.2	99.6	94.7	-	-	92.4	94.2
Memorable	99.0	93.4	103.1	98.4	-	102.8	-	-	91.9	95.3
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.64	-	-	-	0.46	-	-	1.10	-	-
Harvest Rate (intended)	0.09	-	-	-	0.09	-	-	0.02	-	-
% Released	87.3%	-	-	96.5%	97.4%	-	-	98.3%	-	-
Mean Weight	2.64	-	-	2.44	2.89	-	-	3.31	-	-

**Smallmouth Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	0.33	3.00	10.00	6.00	0.80	0.33	-	-	0.00	0.00
<b>Density</b> (electrofishing)										
PSD	72	30	38	48	64	71	-	-	20	40
RSD (preferred)	25	19	13	26	36	29	-	-	-	20
CPUE (preferred)	1.7	1.0	1.0	1.3	1.6	1.3	-	-	0.0	0.4
CPUE (memorable)	0.0	1.3	0.0	0.7	0.8	1.0	-	-	0.0	0.4
CPUE (trophy)	0.0	0.0	0.0	0.3	0.0	0.0	-	-	0.0	0.0
CPUE (total)	7.0	15.3	18.0	15.0	5.2	8.3	-	-	4.0	2.0
CPUE ≥ Stock	6.7	12.3	8.0	9.0	4.4	8.0	-	-	4.0	2.0
CPUE ≥ Preferred	1.7	2.3	1.0	2.3	2.4	2.3	-	-	0.0	0.8
CPUE ≥ MLL (18-inches)	0.0	0.0	0.0	0.7	0.8	0.0	-	-	0.0	0.4
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	87.4	80.4	85.1	83.6	81.5	77.6	-	-	78.9	73.2
Quality	82.5	90.4	81.5	90.5	85.2	73.8	-	-	69.5	70.5
Preferred	78.3	73.6	79.6	73.4	83.6	78.1	-	-	-	79.5
Memorable	-	78.5	-	80.6	80.0	82.1	-	-	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.30	-	-	0.25	0.77	-	-	1.33	-	-
Harvest Rate (intended)	0.10	-	-	0.00	0.15	-	-	0.00	-	-
% Released	89.5%	-	-	99.4%	97.9%	-	-	100.0%	-	-
Mean Weight	3.11	-	-	3.75	3.16	-	-	-	-	-



**Black Crappie**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (electrofishing)										
PSD	94	91	100	99	100	100	-	-	100	90
RSD (preferred)	50	45	36	65	38	72	-	-	38	19
CPUE (total)	12.0	3.7	9.3	23.0	10.4	6.0	-	-	5.2	12.4
CPUE ≥ Stock	12.0	3.7	9.3	23.0	10.4	6.0	-	-	5.2	12.4
CPUE ≥ MLL (10-inches)	6.0	1.7	3.3	15.0	4.0	3.7	-	-	2.0	2.0
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	68.9	84.2	-	96.9	-	-	-	-	-	83.2
Quality	82.4	84.4	92.8	101.1	94.0	89.1	-	-	83.2	83.9
Preferred	83.0	81.8	92.5	95.9	91.4	91.0	-	-	90.1	75.0
Memorable	81.2	-	87.7	91.7	85.8	-	-	-	89.9	75.8
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	38,005	-	-	53,849	62,013	-	-	43,767	-	-
Angler Hours/Acre	2.6	-	-	3.7	4.2	-	-	3.0	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.88	-	-	1.42	1.74	-	-	2.15	-	-
Harvest Rate (any crappie)	0.48	-	-	0.61	0.75	-	-	0.94	-	-
% Released (black crappie)	59.7%	-	-	40.5%	23.4%	-	-	56.6%	-	-
Mean Weight (black crappie)	0.69	-	-	1.13	1.19	-	-	1.35	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	\$79,320	-	-	\$164,360	\$198,060	-	-	\$153,130	-	-

## White Crappie

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (electrofishing)										
PSD	98	100	100	100	100	96	-	-	94	91
RSD (preferred)	60	77	86	90	70	97	-	-	38	35
CPUE (total)	15.0	13.0	11.7	20.7	12.4	9.3	-	-	26.0	21.6
CPUE $\geq$ Stock	15.0	13.0	11.7	20.7	12.0	9.3	-	-	26.0	21.6
CPUE $\geq$ MLL (10-inches)	9.0	10.0	10.0	18.7	8.4	8.0	-	-	7.6	6.4
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	117.0	-	-	-	-	-	-	-	81.7	90.0
Quality	79.7	88.7	90.3	98.7	103.8	89.9	-	-	89.8	86.7
Preferred	85.3	90.6	90.8	98.0	92.1	95.6	-	-	88.1	89.5
Memorable	84.9	88.5	87.9	97.3	88.0	91.5	-	-	89.6	83.3
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	38,005	-	-	53,849	62,013	-	-	43,767	-	-
Angler Hours/Acre	2.6	-	-	3.7	4.2	-	-	3.0	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.88	-	-	1.42	1.74	-	-	2.15	-	-
Harvest Rate (any crappie)	0.48	-	-	0.61	0.75	-	-	0.94	-	-
% Released (white crappie)	73.6%	-	-	63.4%	61.1%	-	-	60.2%	-	-
Mean Weight (white crappie)	0.69	-	-	0.90	0.97	-	-	1.18	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	\$79,320	-	-	\$164,360	\$198,060	-	-	\$153,130	-	-

## Sunfish

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all sunfish)	1,754	-	-	5,052	6,114	-	-	7,124	-	-
Angler Hours/Acre	0.1	-	-	0.3	0.4	-	-	0.5	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (any sunfish)	4.41	-	-	1.66	2.50	-	-	2.38	-	-
Harvest Rate (any sunfish)	1.48	-	-	0.42	1.40	-	-	0.84	-	-
% Released (bluegill)	81.1%	-	-	83.0%	71.5%	-	-	69.9%	-	-
Mean Weight (bluegill)	0.39	-	-	0.67	0.58	-	-	0.67	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Sunfish	\$4,610	-	-	\$14,020	\$15,800	-	-	\$15,260	-	-

## Catfish

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all catfish)	5,995	-	-	9,449	14,431	-	-	6,268	-	-
Angler Hours/Acre	0.4	-	-	0.6	1.0	-	-	0.4	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (any catfish)	0.14	-	-	0.43	0.70	-	-	0.27	-	-
Harvest Rate (any catfish)	0.01	-	-	0.09	0.25	-	-	0.15	-	-
% Released (channel)	100.0%	-	-	100.0%	68.3%	-	-	43.3%	-	-
Mean Weight (channel)	-	-	-	-	5.08	-	-	4.15	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Catfish	\$14,740	-	-	\$38,700	\$45,800	-	-	\$15,530	-	-

## Habitat Enhancement

Type of Work	Details	Quantity	
		New	Renovated
Rebrush	Christmas trees with block	none	none

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	93,833	111,098	74,185	87,914	103,258	77,098	60,624	60,995	-	-
Angler Hours Per Acre	16.5	19.5	13.0	15.5	18.1	13.5	10.7	10.7	-	-
Angler Trips	20,090	28,079	19,039	22,458	24,464	20,008	14,873	12,717	-	-
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	\$230,220	\$369,400	\$258,360	\$382,190	\$379,910	\$342,040	\$288,600	\$217,540	-	-

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	354,865	318,391	334,986	346,327	308,259	291,245	-	286,759	221,108	238,886
Angler Hours Per Acre	10.4	9.3	9.8	10.1	9.0	8.5	-	8.4	6.5	7.0
Angler Trips	62,854	61,861	65,537	66,546	57,970	58,799	-	58,582	50,515	54,734
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	\$1,055,410	\$1,143,880	\$1,351,870	\$2,019,560	\$971,690	\$857,590	-	\$1,388,060	\$845,120	\$1,360,120

## Patrick Henry Reservoir

### Description

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<b>Surface Area:</b> 872 acres	<b>Shoreline Distance:</b> 127 miles
<b>Counties:</b> Sullivan	<b>Drainage Area:</b> 1903 square miles
<b>Full Pool Elevation:</b> 1263 feet above mean sea level	<b>Mean Annual Fluctuation:</b> 5 feet
<b>Maximum Depth:</b> 76 feet	<b>Thermocline Depth:</b> 9 feet
<b>Mean Chlorophyll (Forebay):</b> 11.1 parts per million	<b>Shoreline Development:</b> 34%
<b>Trophic Status (Forebay):</b> Mesotrophic	<b>Trophic Index, Carlson (1977):</b> 54.2
<b>Hydraulic Retention Time:</b> 38 days	<b>Reservoir Age:</b> 61 years (dam completed 1953)
<b>Total Fishing Effort:</b> N/A	<b>Total Value by Anglers:</b> N/A

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### Summary:

#### Electrofishing

The 2014 largemouth bass catch rates were above average for the sixth year in a row. The overall size structure of largemouth bass in the reservoir was very good. A PSD value of 66 indicates that the population has an acceptable mix of fish lengths. An RSD-P value of 36 indicates that the population also had a desired proportion of preferred length (15-inch) in the population. The relative weights for the larger fish were above average for East Tennessee reservoirs; this is probably due to the good forage base of larger gizzard shad in the reservoir.

Smallmouth bass catch rates were above average this year. However, the catch rate for smallmouth bass over the 18-inch minimum size limit was a little below average. Hopefully, the increase in larger size smallmouth bass will continue in this reservoir and will lead to a higher quality smallmouth bass fishery. The relative weights for smallmouth were slightly below average for east Tennessee reservoirs, but there were not many smallmouth collected.

#### Gill Netting

There was not any gillnetting conducted on Ft. Patrick Henry in 2014. With the continued stocking efforts for the rockcastle strain walleye, we plan to continue to monitor this population through electrofishing and gillnetting.

#### Trap Netting

There was no trap netting conducted on Ft. Patrick Henry reservoir in 2014.

#### Habitat Enhancement

There was no habitat enhancement on Ft. Patrick Henry reservoir in 2014.

#### Water Quality

There was no water quality sampling conducted on Ft. Patrick Henry in 2014.

**Lakewide Angling Summary****Total Effort and Expenditures**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Angling Pressure										
Angler Hours	no survey	no survey	no survey	no survey	no survey	no survey	no survey	no survey	63,434	no survey
Angler Hours Per Acre	no survey	no survey	no survey	no survey	no survey	no survey	no survey	no survey	72.8	no survey
Angler Trips	no survey	no survey	no survey	no survey	no survey	no survey	no survey	no survey	15,491	no survey
Value of Fishery (angler expenditures creel)										
All Species	no survey	no survey	no survey	no survey	no survey	no survey	no survey	no survey	\$177,420	no survey

**Largemouth Bass, Patrick Henry**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (electrofishing data - CPUE = # fish/hour)											
Age-1 CPUE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Substock CPUE	7.9	16.8	3.2	12.8	13.6	8.0	9.6	11.2	6.4	7.2	9.7
<b>Density</b> (electrofishing data - CPUE = # fish/hour)											
PSD	85%	79%	79%	76%	70%	50%	78%	73%	76%	66%	73%
RSD - Preferred	68%	60%	47%	40%	49%	32%	57%	45%	53%	36%	49%
CPUE	39.6	55.2	33.6	52.8	78.4	67.2	70.4	88.8	62.4	66.4	61.5
CPUE ≥ Stock	31.7	38.4	30.4	40.0	64.8	59.2	60.8	77.6	56.0	59.2	51.8
<b>Growth</b> (electrofishing data)											
Mean TL at Age-1 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mean TL at Age-3 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Relative Weight</b> (electrofishing data)											
Stock - Quality	99.9	86.0	90.7	89.5	87.9	90.8	84.0	82.0	84.4	80.8	87.6
Quality - Preferred	88.7	82.8	94.2	93.9	98.0	91.4	93.1	88.6	96.7	87.4	91.5
Preferred - Memorable	95.9	94.9	96.8	100.8	98.5	102.6	100.7	93.8	103.7	93.4	98.1
Memorable - Trophy	106.5	102.4	none	117.8	94.2	104.8	98.8	105.1	106.3	109.0	105.0
Trophy	none	none	none	none	none	none	none	none	none	none	none
<b>Mortality</b> (electrofishing data)											
Total Mortality	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**Smallmouth Bass, Patrick Henry**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (electrofishing data - CPUE = # fish/hour)											
Age-1 CPUE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Substock CPUE	2.4	11.2	8.0	11.2	5.6	9.6	7.2	2.4	2.4	5.6	6.6
<b>Density</b> (electrofishing data - CPUE = # fish/hour)											
PSD	50%	58%	67%	52%	67%	63%	74%	93%	76%	78%	68%
RSD - Preferred	36%	42%	52%	24%	48%	54%	51%	75%	59%	50%	49%
CPUE	19.8	26.4	29.6	37.6	22.4	28.8	38.4	34.4	16.0	34.4	28.8
CPUE ≥ Stock	17.4	15.2	21.6	26.4	16.8	19.2	31.2	32.0	13.6	28.8	22.2
CPUE ≥ MSL (18")*	N/A	N/A	N/A	3.2	0.8	1.6	4.0	7.2	4.0	1.6	3.2
<b>Growth</b> (electrofishing data)											
Mean TL at Age-1 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mean TL at Age-3 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Relative Weight</b> (electrofishing data)											
Stock - Quality	90.3	83.0	93.2	84.8	81.7	78.4	79.1	76.6	78.6	77.9	82.4
Quality - Preferred	89.0	81.1	81.2	85.5	85.2	83.0	87.6	83.6	79.5	80.1	83.6
Preferred - Memorable	85.7	80.7	82.8	84.6	86.3	84.0	84.4	79.8	88.4	76.0	83.3
Memorable - Trophy	87.8	81.0	85.2	81.4	104.5	76.8	84.6	79.8	85.7	73.5	84.0
Trophy	none	none	none	none	none	none	none	none	none	none	none
<b>Mortality</b> (electrofishing data)											
Total Mortality	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\* 18" MLL in effect in 2008



**Habitat Enhancement - 2014**

Type of Work	Details	Quantity	
		New	Renovated
Planted	n/a		
Rebrushed	n/a		
Checked and Refurbishe stake beds	n/a		
Rebrushed	n/a		
Added	n/a		
Installed	n/a		

**Water Quality Monitoring - 2014**

Parameter	Sampling Period	Water Quality
Temperature	July to September	n/a
Dissolved Oxyged	July to September	n/a

## Melton Hill Reservoir - 2014

### Description

**Area:** 5,690 acres

**Shoreline:** 170 miles

**Counties:** Anderson, Knox, Loudon, Roane

**Full Pool Elevation (feet-msl):** ~795

**Winter Pool Elevation (feet-msl):** ~792

**Dam Completion:** 1963

**Summary:** No data was collected on Melton Hill this year.

### Lakewide Angling Summary

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	93,833	111,098	74,185	87,914	103,258	77,098	60,624	60,995	-	-
Angler Hours Per Acre	16.5	19.5	13.0	15.5	18.1	13.5	10.7	10.7	-	-
Angler Trips	20,090	28,079	19,039	22,458	24,464	20,008	14,873	12,717	-	-
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	\$230,220	\$369,400	\$258,360	\$382,190	\$379,910	\$342,040	\$288,600	\$217,540	-	-

### Black Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
All Black Bass (hrs)	42,403	-	23,804	36,214	36,902	28,638	27,074	26,067	-	-
All Black Bass (hrs/acre)	7.45	-	4.18	6.36	6.49	5.03	4.76	4.58	-	-
Any Black Bass (hrs)	7,350	-	23,804	36,214	36,280	1,504	0	346	-	-
Any Black Bass (hrs/acre)	1.29	-	4.18	6.36	6.38	0.26	0.00	0.06	-	-
Largemouth Bass (hrs)	32,341	-	0	0	200	26,368	26,871	25,721	-	-
Largemouth Bass (hrs/acre)	5.68	-	0.00	0.00	0.04	4.63	4.72	4.52	-	-
Smallmouth Bass (hrs)	2,712	-	0	0	422	621	203	0	-	-
Smallmouth Bass (hrs/acre)	0.48	-	0.00	0.00	0.07	0.11	0.04	0.00	-	-
Spotted Bass (hrs)	0	-	0	0	0	145	0	0	-	-
Spotted Bass (hrs/acre)	0.00	-	0.00	0.00	0.00	0.03	0.00	0.00	-	-
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	\$140,010	-	\$110,260	\$196,560	\$175,440	\$143,820	\$164,200	\$122,280	-	-
Any Black Bass	\$19,340	-	\$110,260	\$196,560	\$174,010	\$8,160	\$0	\$1,130	-	-
Largemouth Bass	\$110,470	-	\$0	\$0	\$910	\$133,520	\$163,330	\$121,150	-	-
Smallmouth Bass	\$10,200	-	\$0	\$0	\$520	\$1,800	\$870	\$0	-	-
Spotted Bass	\$0	-	\$0	\$0	\$0	\$340	\$0	\$0	-	-

## Largemouth Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	19.00	40.70	11.30	9.30	11.67	19.33	-	-	-	-
<b>Density</b> (electrofishing)										
PSD	72	32	40	58	71	66	-	-	-	-
RSD (preferred)	17	9	10	8	16	22	-	-	-	-
CPUE (total)	69.3	123.3	98.3	153.3	86.0	99.7	-	-	-	-
CPUE ≥ Stock	50.3	82.6	87.0	144.0	74.3	80.3	-	-	-	-
CPUE ≥ MLL (14-inches)	16.3	11.7	11.0	22.3	20.7	29.6	-	-	-	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	5.6	-	-	-	-	-	-	-
Length Age-3	-	-	9.5	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	91.1	87.4	85.0	86.0	80.2	79.2	-	-	-	-
Quality	89.0	87.0	87.1	86.3	80.7	80.1	-	-	-	-
Preferred	92.1	87.9	87.3	89.3	86.7	84.2	-	-	-	-
Memorable	95.5	77.7	83.9	-	93.8	84.3	-	-	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	47.0%	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.50	-	-	-	0.42	0.59	0.97	1.09	-	-
Harvest Rate (intended)	0.12	-	-	-	0.00	0.01	0.04	0.04	-	-
% Released	82.0%	-	99.4%	95.0%	97.3%	98.6%	95.3%	96.6%	-	-
Mean Weight	2.45	-	2.76	2.29	2.36	2.39	2.33	2.91	-	-

## Smallmouth Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	0.00	2.00	1.00	0.30	0.33	1.67	-	-	-	-
<b>Density</b> (electrofishing)										
PSD	100	63	45	77	79	43	-	-	-	-
RSD (preferred)	-	11	10	36	36	24	-	-	-	-
CPUE (preferred)	0.0	3.3	2.3	3.0	1.7	1.3	-	-	-	-
CPUE (memorable)	0.7	0.0	0.0	0.3	0.0	0.3	-	-	-	-
CPUE (trophy)	0.3	0.0	0.0	0.0	0.0	0.0	-	-	-	-
CPUE (total)	0.3	8.3	7.7	7.7	5.0	8.7	-	-	-	-
CPUE $\geq$ Stock	0.3	6.3	6.7	7.4	4.7	7.0	-	-	-	-
CPUE $\geq$ Preferred	1.0	3.3	2.3	3.3	1.7	1.6	-	-	-	-
CPUE $\geq$ MLL (18-inches)	0.0	0.0	0.0	0.0	0.0	0.3	-	-	-	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	87.7	82.4	86.5	82.4	84.1	78.1	-	-	-	-
Quality	-	81.7	81.8	78.5	78.5	74.3	-	-	-	-
Preferred	-	80.5	79.5	76.6	75.6	74.3	-	-	-	-
Memorable	-	-	-	79.4	-	79.2	-	-	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.21	-	-	-	0.17	0.12	0.36	0.00	-	-
Harvest Rate (intended)	0.06	-	-	-	0.00	0.00	0.00	0.00	-	-
% Released	72.2%	-	100.0%	100.0%	99.0%	100.0%	98.5%	88.8%	-	-
Mean Weight	2.65	-	-	-	4.13	-	3.50	3.73	-	-

**Spotted Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	0.30	0.00	0.70	0.00	0.00	0.33	-	-	-	-
<b>Density</b> (electrofishing)										
PSD	29	100	-	33	33	29	-	-	-	-
RSD (preferred)	-	-	-	17	-	6	-	-	-	-
CPUE (total)	2.7	0.3	2.0	2.0	1.0	6.0	-	-	-	-
CPUE $\geq$ Stock	2.4	0.3	1.3	2.0	1.0	5.7	-	-	-	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	91.9	-	96.6	85.4	94.1	83.5	-	-	-	-
Quality	80.6	101.2	-	94.0	78.0	75.1	-	-	-	-
Preferred	-	-	-	88.1	-	84.9	-	-	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	-	-	-	-	-	-	-	-	-	-
Harvest Rate (intended)	-	-	-	-	-	-	-	-	-	-
% Released	100.0%	-	100.0%	100.0%	-	100.0%	-	-	-	-
Mean Weight	-	-	-	-	-	-	-	-	-	-

**Black Crappie**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (electrofishing)										
PSD	-	80	100	100	-	100	-	-	-	-
RSD (preferred)	-	5	90	86	-	100	-	-	-	-
CPUE (total)	-	6.7	3.3	2.3	-	0.7	-	-	-	-
CPUE ≥ Stock	-	6.7	3.3	2.3	-	0.7	-	-	-	-
CPUE ≥ MLL (10-inches)	-	0.3	3.0	2.0	-	0.7	-	-	-	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	87.6	-	-	-	-	-	-	-	-
Quality	-	90.0	78.1	94.7	-	-	-	-	-	-
Preferred	-	-	86.5	91.6	-	87.1	-	-	-	-
Memorable	-	74.2	79.4	81.1	-	-	-	-	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	9,126	-	14,995	14,091	13,011	7,916	3,791	4,149	-	-
Angler Hours/Acre	1.6	-	2.6	2.5	2.3	1.4	0.7	0.7	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.24	-	0.95	0.73	0.96	0.94	0.86	0.64	-	-
Harvest Rate (any crappie)	0.28	-	0.24	0.28	0.28	0.31	0.50	0.37	-	-
% Released (black crappie)	88.2%	-	79.2%	13.3%	-	60.5%	-	-	-	-
Mean Weight (black crappie)	0.71	-	0.86	1.13	-	1.35	-	-	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	\$23,430	-	\$53,160	\$47,290	\$49,870	\$31,870	\$19,690	\$12,180	-	-

## White Crappie

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (electrofishing)										
PSD	100	96	97	100	100	100	-	-	-	-
RSD (preferred)	87	62	51	81	69	92	-	-	-	-
CPUE (total)	10.0	24.7	22.7	19.0	8.7	4.3	-	-	-	-
CPUE ≥ Stock	10.0	24.7	22.7	19.0	8.7	4.3	-	-	-	-
CPUE ≥ MLL (10-inches)	7.7	14.7	11.0	14.7	6.0	4.0	-	-	-	-
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	91.9	85.3	-	-	-	-	-	-	-
Quality	87.1	92.8	86.6	94.7	91.5	81.6	-	-	-	-
Preferred	91.4	85.9	83.8	92.2	84.5	87.1	-	-	-	-
Memorable	85.0	85.9	83.6	89.0	84.0	82.0	-	-	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	9,126	-	14,995	14,091	13,011	7,916	3,791	4,149	-	-
Angler Hours/Acre	1.6	-	2.6	2.5	2.3	1.4	0.7	0.7	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	1.24	-	0.95	0.73	0.96	0.94	0.86	0.64	-	-
Harvest Rate (any crappie)	0.28	-	0.24	0.28	0.28	0.31	0.50	0.37	-	-
% Released (white crappie)	86.3%	-	81.3%	70.4%	75.4%	75.1%	44.8%	35.9%	-	-
Mean Weight (white crappie)	0.74	-	0.75	0.83	0.96	1.05	1.00	1.28	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	\$23,430	-	\$53,160	\$47,290	\$49,870	\$31,870	\$19,690	\$12,180	-	-

**Muskie**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Stocking</b>										
#	2,537	6,169	3,162	1,520	2,629	4,510	5,486	5,342	4,565	2,973
#/Acre	0.4	1.1	0.6	0.3	0.5	0.8	1.0	0.9	0.8	0.5
<b>Angling Pressure (creel)</b>										
Angler Hours	858	-	3,802	2,175	5,585	6,999	4,790	4,789	-	-
Angler Hours/Acre	0.2	-	0.7	0.4	1.0	1.2	0.8	0.8	-	-
<b>Fishing Success (creel)</b>										
Catch Rate (intended)	0.37	-	0.02	0.03	0.03	0.07	0.04	0.02	-	-
Harvest Rate (intended)	0.09	-	0.00	0.00	0.00	0.01	0.00	0.00	-	-
% Released	89.8%	-	100.0%	100.0%	100.0%	95.0%	100.0%	100.0%	-	-
Mean Weight	28.50	-	-	-	-	-	-	-	-	-
<b>Value of Fishery (Trip Expenditures - creel)</b>										
Musky	\$2,680	-	\$16,960	\$16,530	\$42,580	\$50,260	\$30,210	\$20,960	-	-

**Striped Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure (creel)</b>										
Angler Hours	2,382	-	4,159	6,545	4,537	5,243	5,330	3,182	-	-
Angler Hours/Acre	0.4	-	0.7	1.2	0.8	0.9	0.9	0.6	-	-
<b>Fishing Success (creel)</b>										
Catch Rate (intended)	0.43	-	0.10	0.06	0.06	0.10	0.07	0.08	-	-
Harvest Rate (intended)	0.08	-	0.03	0.00	0.00	0.02	0.01	0.00	-	-
% Released	67.6%	-	97.4%	100.0%	100.0%	91.2%	94.1%	100.0%	-	-
Mean Weight	5.00	-	38.80	-	-	10.24	22.40	-	-	-
<b>Value of Fishery (Trip Expenditures - creel)</b>										
Striped Bass	\$5,770	-	\$13,630	\$50,480	\$18,460	\$34,030	\$29,970	\$18,070	-	-



## Sunfish

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all sunfish)	1,339	-	796	2,295	2,581	677	514	2,032	-	-
Angler Hours/Acre	0.2	-	0.1	0.4	0.5	0.1	0.1	0.4	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (any sunfish)	4.09	-	1.80	1.73	1.53	2.64	1.89	1.88	-	-
Harvest Rate (any sunfish)	0.23	-	0.00	0.64	0.75	1.39	1.81	0.82	-	-
% Released (bluegill)	93.2%	-	95.2%	89.8%	70.1%	77.8%	7790.0%	76.0%	-	-
Mean Weight (bluegill)	0.39	-	0.45	0.58	0.41	0.64	0.64	0.70	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Sunfish	\$3,020	-	\$2,270	\$10,710	\$7,230	\$3,060	\$1,340	\$3,000	-	-

## Catfish

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all catfish)	1,825	-	1,877	1,703	2,811	4,169	542	2,484	-	-
Angler Hours/Acre	0.3	-	0.3	0.3	0.5	0.7	0.1	0.4	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (any catfish)	0.34	-	0.72	0.10	0.19	0.20	0.18	0.15	-	-
Harvest Rate (any catfish)	0.13	-	0.08	0.00	0.07	0.13	0.18	0.15	-	-
% Released (channel)	100.0%	-	-	100.0%	89.4%	84.9%	0.0%	-	-	-
Mean Weight (channel)	-	-	-	-	-	4.10	1.90	-	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Catfish	\$4,810	-	\$5,550	\$4,740	\$12,500	\$17,910	\$1,840	\$4,790	-	-

## Habitat Enhancement

Type of Work	Details	Quantity	
		New	Renovated
Rebrush	Christmas trees with block	none	none

## Norris Reservoir - 2014

### Description

**Area:** 34,200 acres

**Shoreline:** 809 miles

**Counties:** Union, Grainger, Claiborne, Campbell, Anderson

**Full Pool Elevation (feet-msl):** ~1020

**Winter Pool Elevation (feet-msl):** ~990

**Dam Completion:** 1936

### Summary:

### Lakewide Angling Summary

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	354,865	318,391	334,986	346,327	308,259	291,245	-	286,759	221,108	238,886
Angler Hours Per Acre	10.4	9.3	9.8	10.1	9.0	8.5	-	8.4	6.5	7.0
Angler Trips	62,854	61,861	65,537	66,546	57,970	58,799	-	58,582	50,515	54,734
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	\$1,055,410	\$1,143,880	\$1,351,870	\$2,019,560	\$971,690	\$857,590	-	\$1,388,060	\$845,120	\$1,360,120

### Black Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
All Black Bass (hrs)	122,872	135,241	142,592	161,902	134,166	136,794	-	130,575	118,438	114,460
(hrs/acre)	3.59	3.95	4.17	4.73	3.92	4.00	-	3.82	3.46	3.35
Any Black Bass (hrs)	83,778	100,115	113,634	124,831	94,181	81,944	-	85,571	78,858	79,410
(hrs/acre)	2.45	2.93	3.32	3.65	2.75	2.40	-	2.50	2.31	2.32
Largemouth Bass (hrs)	5,007	1,351	339	2,244	2,381	9,719	-	2,574	6,182	4,665
(hrs/acre)	0.15	0.04	0.01	0.07	0.07	0.28	-	0.08	0.18	0.14
Smallmouth Bass (hrs)	32,058	33,775	28,619	32,140	36,691	44,573	-	41,945	33,398	30,385
(hrs/acre)	0.94	0.99	0.84	0.94	1.07	1.30	-	1.23	0.98	0.89
Spotted Bass (hrs)	2,029	0	0	2,687	913	558	-	485	0	0
(hrs/acre)	0.06	0.00	0.00	0.08	0.03	0.02	-	0.01	0.00	0.00
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	\$441,630	\$605,760	\$712,800	\$1,186,900	\$469,620	\$514,300	-	\$753,570	\$596,350	\$626,970
Any Black Bass	\$297,250	\$474,110	\$614,920	\$997,680	\$310,620	\$325,210	-	\$572,920	\$454,560	\$493,310
Largemouth Bass	\$21,750	\$7,800	\$3,260	\$4,090	\$10,990	\$44,350	-	\$8,630	\$23,710	\$11,520
Smallmouth Bass	\$87,530	\$123,850	\$94,620	\$183,790	\$146,010	\$144,740	-	\$172,020	\$118,080	\$122,140
Spotted Bass	\$35,100	\$0	\$0	\$1,340	\$2,000	\$0	-	\$0	\$0	\$0

## Largemouth Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
							SMB target		high flows	
Substock CPUE	4.72	3.07	0.67	2.53	1.47	3.14	-	3.07	0.67	4.53
<b>Density</b> (electrofishing)										
PSD	82	74	77	79	76	79	-	75	84	80
RSD (preferred)	50	37	33	30	29	44	-	35	39	38
CPUE (total)	20.6	25.2	27.7	26.9	26.4	31.4	-	35.1	19.3	32.9
CPUE ≥ Stock	15.9	22.1	27.0	24.4	24.9	28.3	-	32.0	18.6	28.4
CPUE ≥ MLL (14-inches)	9.4	10.7	13.6	11.6	11.1	15.9	-	15.6	10.8	15.3
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	87.3	84.1	83.5	84.1	82.5	86.2	-	83.1	84.0	81.0
Quality	85.1	84.0	85.9	83.1	82.3	85.6	-	85.3	82.6	80.2
Preferred	87.7	82.1	84.9	84.5	83.6	83.4	-	83.1	82.7	81.6
Memorable	91.6	82.8	86.9	87.1	93.6	80.1	-	90.0	97.1	77.3
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.24	0.32	0.29	0.10	0.00	0.38	-	0.90	0.38	0.41
Harvest Rate (intended)	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00
% Released	95.8%	91.8%	93.9%	97.1%	96.9%	89.3%	-	100.0%	99.3%	99.4%
Mean Weight	2.87	2.26	1.70	3.07	2.05	1.80	-	-	1.90	2.20

## Smallmouth Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)							SMB target		high flows	
Substock CPUE	0.31	0.53	0.27	0.53	0.00	0.57	-	1.30	0.13	3.47
<b>Density</b> (electrofishing)										
PSD	90	62	44	67	80	78	-	60	70	56
RSD (preferred)	54	42	19	36	52	52	-	35	29	27
CPUE (preferred)	1.1	0.5	0.3	2.4	1.2	3.0	-	3.2	1.7	4.1
CPUE (memorable)	1.1	0.9	0.1	0.8	0.5	1.0	-	2.7	0.3	1.5
CPUE (trophy)	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.1	0.1
CPUE (total)	4.5	4.0	2.4	9.3	3.3	8.3	-	18.1	7.6	24.9
CPUE > Stock	4.2	3.5	2.1	8.8	3.3	7.7	-	16.8	7.5	21.4
CPUE ≥ Preferred	2.2	1.4	0.4	3.2	1.7	4.0	-	5.9	2.1	5.7
CPUE ≥ MLL (18-inches)	0.5	0.8	0.0	0.3	0.0	0.6	-	0.5	0.1	0.5
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	3.3	-	-	-
Length Age-3	-	-	-	-	-	-	11.6	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	91.4	83.6	77.5	82.1	87.6	85.0	80.0	81.6	82.4	86.6
Quality	86.7	84.7	86.0	79.5	83.1	81.2	81.4	82.3	79.1	77.6
Preferred	85.2	73.5	80.0	78.8	83.0	80.1	82.2	78.4	78.4	72.8
Memorable	78.9	73.8	73.8	71.5	81.9	76.7	82.1	75.4	76.5	71.2
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	49.0%	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.34	0.22	0.44	0.72	0.88	0.39	-	0.66	0.39	0.58
Harvest Rate (intended)	0.01	0.00	0.01	0.02	0.09	0.00	-	0.00	0.01	0.00
% Released	95.1%	97.0%	95.4%	96.7%	95.8%	99.4%	-	99.1%	98.7%	100.0%
Mean Weight	3.87	2.84	2.70	2.79	2.45	1.68	-	2.86	4.02	-

## Spotted Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)							SMB target		high flows	
Substock CPUE	4.10	3.60	3.47	2.67	0.93	2.00	-	5.20	0.80	0.67
<b>Density</b> (electrofishing)										
PSD	47	26	35	29	37	54	-	27	41	43
RSD (preferred)	10	6	3	2	-	9	-	2	6	3
CPUE (total)	23.4	20.5	18.8	31.6	10.9	25.1	-	27.7	7.6	20.4
CPUE $\geq$ Stock	19.3	16.9	15.3	28.9	10.0	23.1	-	22.5	6.8	19.7
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	95.9	91.5	92.9	92.4	91.1	93.6	-	88.9	90.8	88.3
Quality	90.1	87.5	92.0	86.6	89.6	89.0	-	86.9	86.1	82.3
Preferred	91.1	88.4	84.1	91.2	-	90.6	-	82.0	89.2	79.2
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.19	-	-	0.38	0.43	2.00	-	0.91	-	-
Harvest Rate (intended)	0.09	-	-	0.28	0.00	2.00	-	0.45	-	-
% Released	86.1%	89.4%	94.9%	90.6%	88.0%	95.2%	-	87.0%	91.1%	98.8%
Mean Weight	1.21	0.91	0.75	0.82	0.75	1.16	-	1.05	0.84	1.10

**Black Crappie**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (trap netting)										
Substock CPUE	0.86	0.05	2.87	0.67	0.16	-	-	-	-	-
<b>Density</b> (trap netting)										
PSD	64	82	58	74	84	-	-	-	-	-
RSD (preferred)	18	29	29	32	58	-	-	-	-	-
CPUE (total)	2.0	1.4	5.3	1.7	1.3	-	-	-	-	-
CPUE ≥ Stock	1.1	1.4	2.4	1.0	1.1	-	-	-	-	-
CPUE ≥ MLL (10-inches)	0.2	0.4	0.7	0.3	0.6	-	-	-	-	-
<b>Growth</b> (trap netting)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (trap netting)										
Stock	87.5	93.0	89.9	95.2	91.8	-	-	-	-	-
Quality	88.8	90.4	88.4	91.6	95.0	-	-	-	-	-
Preferred	88.8	89.7	88.1	92.7	92.4	-	-	-	-	-
Memorable	94.5	85.1	88.5	86.2	90.5	-	-	-	-	-
<b>Mortality</b> (trap netting)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	149,125	180,790	109,572	103,559	110,806	132,453	128,226	102,039	118,247	155,114
#/Acre	4.4	5.3	3.2	3.0	3.2	3.9	3.7	3.0	3.5	4.5
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	23,367	14,232	20,986	23,948	20,226	22,261	-	21,921	14,175	18,908
Angler Hours/Acre	0.7	0.4	0.6	0.7	0.6	0.7	-	0.6	0.4	0.6
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	0.98	1.06	0.83	0.92	0.44	0.71	-	1.02	0.35	0.43
Harvest Rate (any crappie)	0.26	0.49	0.45	0.36	0.16	0.24	-	0.51	0.28	0.31
% Released (black crappie)	74.1%	35.6%	53.4%	61.5%	39.9%	72.1%	-	27.3%	23.4%	31.1%
Mean Weight (black crappie)	0.65	0.67	0.74	0.83	0.76	0.87	-	0.95	0.85	0.64
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	\$42,820	\$29,150	\$46,790	\$69,870	\$29,200	\$43,230	-	\$52,380	\$40,290	\$36,200

## Striped Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (gill netting) (walleye nets)										
Substock CPUE	0.04	0.04	0.00	0.11	0.00	0.04	0.04	0.00	0.19	0.00
<b>Density</b> (gill netting) (walleye nets)										
PSD	-	30	58	59	48	77	85	46	47	49
RSD (preferred)	-	4	2	3	2	10	5	8	6	2
CPUE (total)	0.2	0.9	1.2	1.3	2.2	1.2	0.9	0.6	1.8	2.1
CPUE ≥ Stock	0.2	0.9	1.2	1.2	2.2	1.2	0.8	0.6	1.6	2.1
CPUE ≥ 15-inches	0.2	0.7	1.1	1.1	2.0	1.2	0.8	0.6	1.6	2.1
<b>Growth</b> (gill netting) (walleye nets)										
Length Age-2	-	16.8	18.3	16.3	17.3	-	18.0	-	17.6	-
Length Age-3	-	23.3	22.8	22.5	22.0	-	23.1	-	23.1	-
<b>Condition</b> (gill netting) (walleye nets)										
Stock	97.5	93.1	89.5	97.2	92.9	99.4	92.7	92.8	93.1	94.1
Quality	-	96.6	93.1	88.1	90.9	92.6	88.3	87.6	89.2	91.8
Preferred	-	84.6	94.1	-	84.3	84.2	72.4	-	81.9	82.5
Memorable	-	-	-	-	-	-	-	-	-	-
<b>Stocking</b>										
#	103,655	129,811	103,997	108,103	106,676	103,201	119,949	106,586	104,228	109,330
#/Acre	3.0	3.8	3.0	3.2	3.1	3.0	3.5	3.1	3.0	3.2
<b>Angling Pressure</b> (creel)										
Angler Hours	40,493	60,975	41,428	33,232	62,133	26,507	-	34,918	19,258	65,708
Angler Hours/Acre	1.2	1.8	1.2	1.0	1.8	0.8	-	1.0	0.6	1.9
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.14	0.17	0.28	0.26	0.08	0.18	-	0.27	0.20	0.22
Harvest Rate (intended)	0.02	0.01	0.04	0.04	0.02	0.00	-	0.12	0.07	0.06
% Released	84.1%	85.7%	91.0%	75.7%	74.0%	98.3%	-	63.3%	68.4%	69.5%
Mean Weight	9.27	10.54	7.79	10.23	12.30	9.05	-	10.84	10.45	12.60
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Striped Bass	\$142,730	\$255,210	\$134,910	\$293,220	\$261,760	\$67,250	-	\$292,310	\$100,540	\$551,890

**Walleye**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (gill netting)										
Substock CPUE	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Density</b> (gill netting)										
PSD	91	99	96	93	95	89	99	93	98	98
RSD (preferred)	15	21	13	13	25	27	17	22	19	35
CPUE (total)	4.9	5.8	2.8	5.8	6.2	6.2	6.5	8.2	5.4	6.3
CPUE ≥ Stock	4.9	5.8	2.8	5.8	6.2	6.2	6.5	8.2	5.4	6.3
CPUE ≥ MLL (15-inches)	4.4	5.7	2.6	5.4	5.9	5.5	6.5	7.6	5.2	6.2
<b>Growth</b> (gill netting)										
Length Age-1	11.7	10.6	11.7	12.1	12.8	-	-	-	11.6	-
Length Age-3	18.1	18.2	18.4	18.3	18.9	-	18.9	-	18.0	-
<b>Condition</b> (gill netting)										
Stock	92.1	90.9	88.3	93.1	91.6	92.5	88.9	91.1	93.1	91.8
Quality	89.0	88.8	85.8	89.3	89.3	90.6	89.3	88.5	89.2	91.1
Preferred	86.3	85.5	84.4	83.7	88.2	88.1	88.8	86.5	88.5	91.0
Memorable	-	-	-	-	-	87.0	-	82.4	80.9	-
<b>Mortality</b> (gill netting)										
Total Mortality	-	43.0%	-	32.0%	40.0%	-	-	-	45.0%	-
<b>Stocking</b>										
#	260,144	179,250	197,472	187,589	170,066	194,584	284,146	194,291	240,267	212,123
#/Acre	7.6	5.2	5.8	5.5	5.0	5.7	8.3	5.7	7.0	6.2
<b>Angling Pressure</b> (creel)										
Angler Hours	57,604	48,526	45,729	40,665	20,597	43,013	-	30,013	21,801	11,240
Angler Hours/Acre	1.7	1.4	1.3	1.2	0.6	1.3	-	0.9	0.6	0.3
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	0.20	0.10	0.06	0.08	0.08	0.03	-	0.12	0.11	0.21
Harvest Rate (intended)	0.16	0.09	0.05	0.07	0.05	0.02	-	0.10	0.11	0.11
% Released	22.7%	10.2%	13.9%	18.5%	43.3%	57.1%	-	18.5%	11.1%	49.7%
Mean Weight	2.20	2.11	2.22	2.29	3.45	2.89	-	2.74	3.18	1.75
<b>Value of Fishery</b> (Trip Expenditures - creel)										
Walleye	\$154,570	\$124,200	\$176,350	\$200,580	\$31,420	\$102,450	-	\$105,530	\$37,850	\$34,360



## Sunfish

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all sunfish)	37,585	11,096	21,485	25,006	36,133	13,787	-	17,128	16,305	7,400
Angler Hours/Acre	1.1	0.3	0.6	0.7	1.1	0.4	-	0.5	0.5	0.2
<b>Fishing Success</b> (creel)										
Catch Rate (any sunfish)	4.08	2.82	4.01	2.24	2.26	1.03	-	2.55	3.75	2.42
Harvest Rate (any sunfish)	1.82	1.11	1.47	1.17	1.30	0.32	-	1.27	2.10	1.63
% Released (bluegill)	70.1%	60.7%	68.2%	61.8%	55.1%	86.9%	-	37.2%	-	48.3%
Mean Weight (bluegill)	0.23	0.31	0.27	0.25	0.34	0.32	-	0.39	-	0.31
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Sunfish	\$71,250	\$36,950	\$54,890	\$70,350	\$54,520	\$24,300	-	\$35,910	\$38,160	\$17,190

## Catfish

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all catfish)	4,534	1,180	2,488	345	3,895	3,801	-	1,314	2,840	677
Angler Hours/Acre	0.1	0.0	0.1	0.0	0.1	0.1	-	0.0	0.1	0.0
<b>Fishing Success</b> (creel)										
Catch Rate (any catfish)	0.40	0.00	0.11	0.00	0.00	0.26	-	0.25	0.74	0.00
Harvest Rate (any catfish)	0.40	0.00	0.11	0.00	0.00	0.26	-	0.25	0.74	0.00
% Released (channel)	71.3%	91.3%	70.9%	65.0%	65.4%	46.5%	-	84.2%	40.9%	46.8%
Mean Weight (channel)	2.41	2.16	1.34	1.44	1.27	2.44	-	3.55	3.48	2.90
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Catfish	\$3,510	\$1,660	\$3,590	-	-	\$2,880	-	\$1,550	-	-

## Shad

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (Summer Shad Gill Netting) (geometric means)										
Alewife CPUE	0.4	0.1	1.6	1.6	1.2	-	-	0.5	0.6	0.1
Gizzard CPUE	5.3	0.9	1.7	1.3	1.2	-	-	1.7	0.9	0.8
Threadfin CPUE	3.8	1.1	6.2	3.2	1.3	-	-	0.2	0.5	1.2

## Habitat Enhancement

Type of Work	Details	Quantity	
		New	Renovated
Rebrush	Christmas trees with cable drives		165 units, 3.3 acres

## Water Quality Monitoring

Parameter	Sampling Period	Water Quality
Temperature	July - August	Normal
Dissolved Oxygen	July - August	Above Average
PH	July - August	Normal
Conductivity	July - August	Normal

## South Holston Reservoir

### Description

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<b>Surface Area:</b> 7,580 acres	<b>Shoreline Distance:</b> 182 miles
<b>Counties:</b> Sullivan, Washington (VA)	<b>Drainage Area:</b> 703 square miles
<b>Full Pool Elevation:</b> 1,729 feet above mean sea level	<b>Mean Annual Fluctuation:</b> 39 feet
<b>Maximum Depth:</b> 245 feet	<b>Thermocline Depth:</b> 13 feet
<b>Mean Chlorophyll (Forebay):</b> 4.2 parts per million	<b>Shoreline Development:</b> 14%
<b>Trophic Status (Forebay):</b> Mesotrophic	<b>Trophic Index, Carlson (1977):</b> 44.7
<b>Hydraulic Retention Time:</b> 340 days	<b>Reservoir Age:</b> 64 years (dam completed 1950)
<b>Total Fishing Effort:</b> N/A	<b>Total Value by Anglers:</b> N/A

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### Summary:

#### Electrofishing

The total number of largemouth bass collected was about average, compared to the last 10 years. A PSD value of 85 would indicate that the size structure is dominated by larger fish. There were also good numbers of largemouth collected under 10-inches, which should keep the quality of this fishery stable.

The total number of smallmouth bass collected was slightly above average at 28.8 fish/hour. The number of smallmouth over the MLL of 15-inches was also slightly above normal at 8.6 fish/hour. There were also good numbers of smallmouth bass collected from 7 to 14 inches. These fish should recruit into larger size classes and result in more keeper size fish for anglers to catch.

We also collected one spotted bass in our electrofishing sample. This was the second spotted bass we have collected on this reservoir. Spotted bass rarely reach quality size in east Tennessee reservoirs and they compete with other more desirable black bass species. Spotted bass have also been shown to hybridize and prey on other black bass species.

The number of black crappie collected in 2014 was one largest samples collected on the reservoir at 29.4.0 fish/hour. There was also a large number of crappie collected over the MLL of 10-inches.

#### Gill Netting

On December 9, 2014 we collected 90 walleye in six experimental gill nets on South Holston Reservoir. The gill nets were set from Observation Knob Park downstream to Big Creek.

The catch rates were above average at 15 fish per net night. A large percentage of the fish collected (75%) were above the 18-inch size limit, indicating that the fish are recruiting into the larger size classes.

These catch rates combined with the large percentage of walleye collected over 18-inches should indicate that the walleye fishing will be good on South Holston Reservoir in 2015.

**Trap Netting**

There was no trap netting conducted on South Holston Reservoir in 2014

**Habitat Enhancement**

There was no habitat enhancement on South Holston Reservoir in 2014.

**Water Quality**

Water quality samples were collected at two sites on South Holston Reservoir during July, August, and September 2014. The results from these samples were normal for South Holston Reservoir.

**Lakewide Angling Summary**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Angling Pressure										
Angler Hours		124,909	121,926	no survey	no survey	no survey	no survey	169,822	no survey	no survey
Angler Hours Per Acre		19.8	19.2	no survey	no survey	no survey	no survey	26.7	no survey	no survey
Angler Trips		19,198	18,866	no survey	no survey	no survey	no survey	26,499	no survey	no survey
Value of Fishery (angler expenditures creel)										
All Species		\$222,450	\$216,640	no survey	no survey	no survey	no survey	\$683,760	no survey	no survey

**Black Bass, South Holston Reservoir**

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Angling Pressure</b> (creel survey data)												
All Black Bass	(hrs)	N	75,404	72,371	N	N	80,172	129,756	115,096	N	N	94,560
	(hrs/acre)	o	9.9	9.5	o	o	10.6	17.1	15.1	o	o	12.5
Any Black Bass	(hrs)		66,909	64,527			76,226	126,178	106,061			87,980
	(hrs/acre)		8.8	8.5			10.1	16.6	14.0			11.6
Largemouth Bass	(hrs)	S	0	280	S	S	0	1,176	192	S	S	330
	(hrs/acre)	u	0.0	0.0	u	u	0.0	0.2	0.0	u	u	0.0
Smallmouth Bass	(hrs)	r	8,495	7,564	r	r	3,946	2,402	8,843	r	r	6,250
	(hrs/acre)	v	1.1	1.0	v	v	0.5	0.3	1.2	v	v	0.8
Spotted Bass	(hrs)	e	0	0	e	e	0	0	0	e	e	0
	(hrs/acre)	y	0.0	0.0	y	y	0.0	0.0	0.0	y	y	0.0
<b>Tournaments</b> (BITE program & creel survey data)												
# Tournaments (BITE)		1	1	none reported	none reported	none reported	none reported	none reported	none reported	none reported	none reported	1
Pounds/Angler Day (BITE)		2.83	1.92	none reported	none reported	none reported	none reported	none reported	none reported	none reported	none reported	2.38
Bass/Angler Day (BITE)		1.52	1.31									1.42
<b>Value of Fishery</b> (creel survey data - trip expenditures)												
All Black Bass			\$147,040	\$144,320			\$390,100	\$655,920	\$492,350			\$365,946
Any Black Bass			\$134,640	\$136,890			\$374,510	\$616,810	\$455,770			\$343,724
Largemouth Bass	No Survey		\$0	\$1,270	No Survey	No Survey	\$0	\$21,740	\$1,190	No Survey	No Survey	\$4,840
Smallmouth Bass			\$12,400	\$6,160			\$15,590	\$17,370	\$35,390			\$17,382
Spotted Bass			\$0	\$0			\$0	\$0	\$0			\$0

**Largemouth Bass, South Holston Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Recruitment (electrofishing data)											
Age-1 CPUE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Substock CPUE	1.4	2.2	0.4	2.4	1.5	5.2	3.6	2.0	1.2	1.8	2.2
Density (electrofishing data - CPUE = # fish/hour)											
PSD	69%	81%	82%	83%	79%	73%	81%	81%	81%	85%	80%
RSD - Preferred	51%	44%	59%	53%	55%	46%	48%	44%	43%	58%	50%
CPUE	14.8	12.6	19.2	35.8	29.2	37.6	27.1	18.2	23.2	23.8	24.1
CPUE ≥ Stock	13.4	10.4	18.8	33.4	27.7	32.4	23.5	16.2	22.0	22.0	22.0
CPUE ≥ MSL	N o M i n i m u m S i z e L i m i t										
Growth (electrofishing data)											
Mean TL at Age-1 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mean TL at Age-3 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Relative Weight (electrofishing data)											
Stock - Quality	89.5	91.9	96.3	92.8	88.7	88.4	84.2	86.3	87.1	86.7	89.2
Quality - Preferred	92.2	93.0	99.2	97.3	94.3	95.0	94.3	93.1	91.7	91.2	94.1
Preferred - Memorable	96.5	89.8	99.7	101.2	97.7	97.7	93.3	92.6	93.7	94.6	95.7
Memorable - Trophy	none	89.0	93.7	97.4	93.2	91.5	89.3	91.2	96.1	92.4	92.6
Trophy	none	none	none	none	none	none	none	none	none	none	none
Mortality (electrofishing data)											
Total Mortality	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fishing Success (creel survey data)											
Catch Rate	No	0.05	0.05	No	No	0.15	0.15	0.15	No	No	0.11
Harvest Rate		0.00	0.01			0.00	0.00	0.00			
Percent Harvested	Survey	8.1%	11.3%	Survey	Survey	2.7%	2.9%	3.1%	Survey	Survey	5.6%
Mean Weight (pounds)		2.05	2.11			5.66	1.61	3.8			3.046

**Smallmouth Bass, South Holston Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (electrofishing data)											
Age-1 CPUE	N/A	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1
Substock CPUE	2.5	2.4	1.0	1.8	1.4	4.8	1.6	2.2	1.0	3.2	2.2
<b>Density</b> (electrofishing data - CPUE = # fish/hour)											
PSD	63%	41%	69%	80%	87%	77%	82%	56%	82%	70%	71%
RSD - Preferred	38%	29%	46%	47%	57%	64%	63%	33%	65%	49%	49%
CPUE	17.8	10.6	21.6	27.2	21.4	26.8	37.8	16.20	25.8	28.8	23.4
CPUE ≥ Stock	15.3	8.2	20.6	25.4	20.0	22.0	36.3	14.00	24.8	25.6	21.2
CPUE ≥ MSL*	N/A	N/A	N/A	5.6	1.4	11.0	17.7	3.2	10.2	8.6	8.2
<b>Growth</b> (electrofishing data)											
Mean TL at Age-1 (mm)	N/A	129	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	129
Mean TL at Age-3 (mm)	N/A	324	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	324
<b>Relative Weight</b> (electrofishing data)											
Stock - Quality	88.7	89.2	88.4	93.8	92.6	92.2	88.6	81.9	86.8	81.2	88.3
Quality - Preferred	93.4	93.9	89.6	98.4	92.4	90.1	94.4	92.0	89.2	86.0	91.9
Preferred - Memorable	89.8	96.0	97.1	94.4	91.8	92.3	96.2	92.8	88.6	84.4	92.3
Memorable - Trophy	89.6	90.3	94.5	90.7	90.0	86.0	94.4	89.1	89.7	80.4	89.5
Trophy	none	none	none	none	none	none	none	none	none	none	none
<b>Mortality</b> (electrofishing data)											
Total Mortality	N/A	0.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.48
<b>Fishing Success</b> (creel survey data)											
Catch Rate	No	0.17	0.16	No	No	0.40	0.33	0.43	No	No	0.30
Harvest Rate		0.01	0.02			0.03	0.04	0.02			0.02
Percent Harvested	Survey	7.8%	14.2%	Survey	Survey	8.0%	10.5%	4.6%	Survey	Survey	9.0%
Mean Weight (pounds)		2.64	2.44			3.64	3.54	3.32			3.12

\* 16" MLL in effect in 2008, 18" in 2009, and 15" in 2010.

**Spotted Bass, South Holston Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Recruitment (electrofishing data)											
Age-1 CPUE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Substock CPUE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Density (electrofishing data - CPUE = # fish/hour)											
PSD	none	none	none	none	none	none	none	none	none	none	none
RSD - Preferred	none	none	none	none	none	none	none	none	none	none	none
CPUE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0
CPUE ≥ Stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
CPUE ≥ MSL	N o M i n i m u m S i z e L i m i t										
Growth (electrofishing data)											
Mean TL at Age-1 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mean TL at Age-3 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Relative Weight (electrofishing data)											
Stock - Quality	none	none	none	none	none	none	none	none	97.3	118.2	107.75
Quality - Preferred	none	none	none	none	none	none	none	none	none	none	none
Preferred - Memorable	none	none	none	none	none	none	none	none	none	none	none
Memorable - Trophy	none	none	none	none	none	none	none	none	none	none	none
Trophy	none	none	none	none	none	none	none	none	none	none	none
Mortality (electrofishing data)											
Total Mortality	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fishing Success (creel survey data)											
Catch Rate	none	none	none	none	none	none	none	none	none	none	#DIV/0!
Harvest Rate	none	none	none	none	none	none	none	none	none	none	#DIV/0!
Percent Harvested	none	none	none	none	none	none	none	none	none	none	#DIV/0!
Mean Weight (pounds)	none	none	none	none	none	none	none	none	none	none	



**Black Crappie, South Holston Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (electrofishing data) - CPUE = # fish/ hour											
Age-0 CPUE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Substock CPUE	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.00	0.4	0.2	0.1
<b>Density</b> (electrofishing data) - CPUE = # fish/ hour											
PSD	96%	87%	98%	99%	95%	100%	88%	98%	96%	76%	93%
RSD - Preferred	77%	62%	74%	86%	79%	89%	44%	71%	80%	49%	71%
CPUE	8.5	10.4	18.2	34.6	17.5	11.0	22.6	11.6	21.0	29.4	18.5
CPUE ≥ Stock	8.5	10.4	18.2	34.6	17.5	10.6	22.6	11.6	20.6	29.2	18.4
CPUE ≥ MSL (10")	6.1	6.0	11.0	26.6	13.3	9.0	11.2	6.6	15.0	12.8	11.8
<b>Growth</b> (electrofishing data)											
Mean TL at Age-1 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mean TL at Age-3 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	254
<b>Relative Weight</b> (electrofishing data)											
Stock - Quality	94.9	98.5	96.3	95.8	99.7	none	103.2	90.7	93.1	95.3	96.4
Quality - Preferred	101.8	100.3	99.2	96.3	99.4	105.3	103.6	96.6	96.4	95.5	99.4
Preferred - Memorable	94.7	97.2	97.2	95.8	91.0	96.2	96.9	98.4	92.1	92.6	95.2
Memorable - Trophy	86.9	90.0	93.7	91.3	87.4	91.4	94.2	90.6	90.3	88.9	90.5
Trophy	none	none	none	none	none	none	none	none	none	none	none
<b>Mortality</b> (electrofishing data)											
Total Mortality	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Stocking</b>											
# per Acre	0.0	0.0	0.0	0.0	0.0	0.0	9.7	0.0	8.3	9.5	2.8
<b>Angling Pressure</b> (creel survey data - any crappie)											
Angler Hours	N	11,595	7,564	N	N	6,003	3,746	1,743	N	N	6,130
Angler Hours/Acre		1.5	1.0	o	o	0.8	0.5	0.2	o	o	0.2
<b>Fishing Success</b> (creel survey data)											
Catch Rate	S	0.12	0.13	S	S	0.77	1.24	2.44	S	S	0.94
Harvest Rate	u	0.09	0.09	u	u	0.46	0.80	1.84	u	u	0.66
Percent Harvested	r	64.2%	62.2%	r	r	72.4%	77.9%	46.5%	r	r	64.6%
Mean Weight (pounds)	v	0.94	0.89	v	v	1.22	1.06	0.83	v	v	0.988
<b>Value of Fishery</b> (creel survey data - trip expenditures)											
Any Crappie	y	\$17,840	\$11,200	y	y	\$9,580	\$4,790	\$3,830	y	y	\$9,448

**Walleye, South Holston Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (winter gill net data)											
Substock CPUE	no sample	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
<b>Density</b> (winter gill net data - CPUE = # fish/net night)											
PSD	no sample	91%	93%	79%	92%	85%	95%	95%	93%	100%	91%
RSD - Preferred	no sample	38%	59%	45%	22%	27%	22%	43%	60%	54%	41%
CPUE	no sample	8.3	6.3	12.6	10.9	14.8	12.2	9.3	6.7	15.0	10.7
CPUE ≥ Stock	no sample	8.2	6.3	12.6	10.9	14.8	12.2	9.3	6.7	15.0	10.7
CPUE ≥ MSL (18")	no sample	4.17	4.86	8.08	5.00	9.50	7.16	7.0	5.0	11.30	6.9
<b>Growth</b> (winter gill net data)											
Mean TL at Age-1 (mm)	no sample	411	415	450	434	435	434	no sample	452	no sample	433
Mean TL at Age-3 (mm)	no sample	539	537	524	525	516	515	no sample	518	no sample	524.8571
<b>Relative Weight</b> (winter gill net data)											
Stock - Quality	no sample	105.5	99.7	103.4	104.0	90.7	92.9	99.4	98.6	none	99.3
Quality - Preferred	no sample	96.4	95.1	103.6	96.5	97.4	97.1	97.9	105.2	97.8	98.6
Preferred - Memorable	no sample	97.1	97.3	101.7	94.2	96.1	97.6	100.3	102.6	99.2	98.5
Memorable - Trophy	no sample	93.7	96.7	none	87.6	91.6	none	none	99.5	99.7	94.8
Trophy	no sample	none	none	none	none	none	none	none	none	none	none
<b>Mortality</b> (winter gill net data)											
Total Mortality	no sample	48%	N/A	N/A	32%	N/A	N/A	N/A	N/A	N/A	40%
<b>Stocking*</b>											
# per Acre	5.4	7.5	5.1	5.4	3.3	5.8	0.0	0.0	0.0	0.0	3.3
<b>Angling Pressure</b> (creel survey data - walleye data only)											
Angler Hours	N	17,580	21,543	N	N	9,040	13,584	28,600	N	N	18,069
Angler Hours/Acre	N	2.32	2.84	N	N	1.19	1.79	3.77	N	N	0.59
<b>Fishing Success</b> (creel survey data - walleye data only)											
Catch Rate	S	not calculated	not calculated	S	S	not calculated	not calculated	not calculated	S	S	not calculated
Harvest Rate	u	not calculated	not calculated	u	u	not calculated	not calculated	not calculated	u	u	not calculated
Percent Harvested	r	55.5%	59.0%	r	r	73.0%	87.8%	80.0%	r	r	71.1%
Mean Weight (pounds)	v	3.32	3.35	v	v	5.27	4.30	4.24	v	v	4.10
<b>Value of Fishery</b> (creel survey data - trip expenditures)											
Walleye Data Only	y	\$33,010	\$37,930	y	y	\$30,550	\$50,210	\$107,070	y	y	\$51,754

\* Does not include fish stocked by Virginia Dept. of Game and Inland Fisheries

**Trout, South Holston Reservoir**

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Angling Pressure</b> (creel survey data)												
All Trout	(hrs)	N	8,287	10,467	N	N	16,574	27,644	10,646	N	N	12,270
	(hrs/acre)	O	1.1	1.4	O	O	2.2	3.6	1.4	O	O	1.9
Any Trout	(hrs)		6,565	10,099			10,212	13,422	1,703			8,400
	(hrs/acre)		0.9	1.3			1.3	1.8	0.2			1.1
Rainbow Trout	(hrs)	S	1,722	368	S	S	1,672	3,968	673	S	S	1,681
	(hrs/acre)	u	0.2	0.0	u	u	0.2	0.5	0.1	u	u	0.2
Brown Trout	(hrs)	r	0	0	r	r	0	0	0	r	r	0
	(hrs/acre)	v	0.0	0.0	v	v	0.0	0.0	0.0	v	v	0.0
Lake Trout	(hrs)	e	0	0	e	e	4,690	10,254	8,270	e	e	4,643
	(hrs/acre)	y	0.0	0.0	y	y	0.1	0.1	1.1	y	y	0.3
<b>Value of Fishery</b> (creel survey data - trip expenditures)												
All Trout			\$12,240	\$13,520			\$41,270	\$73,710	\$35,380			\$35,224
Any Trout			\$9,780	\$12,740			\$24,740	\$26,080	\$4,610			\$15,590
Rainbow Trout	No Survey		\$2,460	\$780	No Survey	No Survey	\$3,370	\$17,090	\$3,730	No Survey	No Survey	\$5,486
Brown Trout			\$0	\$0			\$0	\$0	\$0			\$0
Lake Trout			\$0	\$0			\$13,160	\$30,540	\$27,040			\$14,148

**Lake Trout, South Holston Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Fishing Success</b> (creel survey data)											
Catch Rate	No	none	none	No	No	not calculated	not calculated	not calculated	No	No	
Harvest Rate		none	none			not calculated	not calculated	not calculated			
Percent Harvested	Survey	none	none	Survey	Survey	67.5%	61.1%	37.9%	Survey	Survey	55.5%
Mean Weight (pounds)		none	none			3.66	4.46	4.09			4.07

**Sunfish, South Holston Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Angling Pressure</b> (creel survey data - any sunfish)											
Angler Hours		233	792			3,773	13,434	1,604			3,967
Angler Hours/Acre	N	0.03	0.10	N	N	0.50	1.77	0.20	N	N	0.13
<b>Fishing Success</b> (creel survey data - bluegill only)											
Catch Rate (bluegill)	S	4.61	1.52	S	S	1.80	1.68	1.49	S	S	2.22
Harvest Rate (bluegill)	u	1.51	0.35	u	u	0.02	0.18	0.34	u	u	0.48
% Harvested (bluegill)	r	9.8%	15.6%	r	r	2.3%	6.7%	3.9%	r	r	7.7%
Mean Weight (bluegill)	v	0.23	0.26	v	v	0.37	0.33	none	v	v	0.30
<b>Value of Fishery</b> (creel survey data - trip expenditures)											
Any Sunfish	y	\$290	\$530	y	y	\$4,220	\$21,870	\$3,730	y	y	\$6,128

\* Bluegill only

**Catfish, South Holston Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Angling Pressure</b> (creel survey data - any catfish)											
Angler Hours	N	851	3,106	N	N	468	890	131	N	N	1,089
Angler Hours/Acre		0.11	0.41			0.06	0.12	0.01			0.04
<b>Fishing Success</b> (creel survey data)											
Catch Rate (channel cat)	S	0.18	0.11	S	S	0.37	0.14	0.00	S	S	0.16
Harvest Rate (channel cat)	u	0.18	0.11	u	u	0.08	0.13	0.00	u	u	0.10
% Harvested (channel cat)	r	40.4%	65.2%	r	r	16.6%	42.5%	21.5%	r	r	37.2%
Mean Weight (channel cat)	v	2.85	2.93	v	v	3.14	3.09	4.19	v	v	3.24
<b>Value of Fishery</b> (creel survey data - trip expenditures)											
Any Catfish	y	\$2,090	\$2,960	y	y	\$2,590	\$2,160	\$3,810	y	y	\$2,722

**Shad, South Holston Reservoir**

<b>Shad</b>											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Density</b> (summer shad gill net data - geometric mean density)											
Gizzard Shad	3.1	1.3	No Sample	No Sample	No Sample	No Sample	No Sample	No Sample	No Sample	No Sample	2.2
Threadfin Shad	3.9	2.7	No Sample	No Sample	No Sample	No Sample	No Sample	No Sample	No Sample	No Sample	3.3
Alewife	0.2	0.2	No Sample	No Sample	No Sample	No Sample	No Sample	No Sample	No Sample	No Sample	0.2

**Habitat Enhancement South Holston Reservoir**

Type of Work	Details	Quantity	
		New	Renovated

\*No Habitat Work in 2014

**Water Quality Monitoring South Holston Reservoir**

Parameter	Sampling Period	Water Quality
Temperature	July to September	normal
Dissolved Oxygen	July to September	normal

## Tellico Reservoir - 2014

### Description

**Area:** 16,056 acres

**Shoreline:** 357 miles

**Counties:** Monroe, Blount, Loudon

**Full Pool Elevation (feet-msl):** ~813

**Winter Pool Elevation (feet-msl):** ~807

**Dam Completion:** 1979

### Summary:

#### Lakewide Angling Summary

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
Angler Hours	-	226,458	190,448	-	-	132,151	112,382	-	147,269	-
Angler Hours Per Acre	-	14.1	11.9	-	-	8.2	7.0	-	9.2	-
Angler Trips	-	48,705	42,112	-	-	31,780	24,543	-	31,374	-
<b>Value of Fishery (angler expenditures creel)</b>										
All Species	-	\$673,860	\$679,630	-	-	\$586,930	\$497,340	-	\$609,580	-

#### Black Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b>										
All Black Bass (hrs)	-	105,515	80,036	-	-	50,590	44,266	-	58,837	-
All Black Bass (hrs/acre)	-	6.57	4.98	-	-	3.15	2.76	-	3.66	-
Any Black Bass (hrs)	-	105,515	80,036	-	-	1,086	328	-	0	-
Any Black Bass (hrs/acre)	-	6.57	4.98	-	-	0.07	0.02	-	0.00	-
Largemouth Bass (hrs)	-	0	0	-	-	44,988	42,739	-	56,708	-
Largemouth Bass (hrs/acre)	-	0.00	0.00	-	-	2.80	2.66	-	3.53	-
Smallmouth Bass (hrs)	-	0	0	-	-	4,516	1,199	-	2,129	-
Smallmouth Bass (hrs/acre)	-	0.00	0.00	-	-	0.28	0.07	-	0.13	-
Spotted Bass (hrs)	-	0	0	-	-	0	0	-	0	-
Spotted Bass (hrs/acre)	-	0.00	0.00	-	-	0.00	0.00	-	0.00	-
<b>Value of Fishery (Trip Expenditures)</b>										
All Black Bass	-	\$374,920	\$389,330	-	-	\$272,450	\$218,140	-	\$338,880	-
Any Black Bass	-	\$374,920	\$389,330	-	-	\$4,740	\$1,810	-	\$0	-
Largemouth Bass	-	\$0	\$0	-	-	\$242,470	\$210,210	-	\$328,930	-
Smallmouth Bass	-	\$0	\$0	-	-	\$25,240	\$6,120	-	\$9,950	-
Spotted Bass	-	\$0	\$0	-	-	\$0	\$0	-	\$0	-

## Largemouth Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	15.00	5.70	15.00	11.30	4.00	8.67	-	-	6.33	3.67
<b>Density</b> (electrofishing)										
PSD	67	45	65	57	72	65	-	-	62	61
RSD (preferred)	18	12	15	12	15	11	-	-	16	11
CPUE (total)	77.0	48.7	37.0	56.0	44.0	58.7	-	-	48.0	54.7
CPUE ≥ Stock	62.0	43.0	22.0	44.7	40.0	50.0	-	-	41.7	51.0
CPUE ≥ MLL (14-inches)	20.3	10.3	4.0	8.0	9.6	10.3	-	-	12.3	8.6
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	80.5	79.0	80.4	80.1	77.7	81.5	-	-	78.9	76.7
Quality	83.5	81.7	80.2	80.8	78.4	79.7	-	-	78.8	81.1
Preferred	86.8	92.2	85.8	87.0	83.7	86.0	-	-	86.6	79.9
Memorable	80.3	95.9	87.6	86.7	85.6	88.1	-	-	90.4	96.6
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	-	-	-	-	-	0.72	0.96	-	0.92	-
Harvest Rate (intended)	-	-	-	-	-	0.03	0.01	-	0.05	-
% Released	-	97.6%	98.2%	-	-	97.3%	98.9%	-	96.3%	-
Mean Weight	-	2.69	1.94	-	-	2.63	1.44	-	2.88	-

## Smallmouth Bass

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	1.00	2.30	2.00	0.00	0.00	1.67	-	-	0.00	0.67
<b>Density</b> (electrofishing)										
PSD	46	32	54	56	60	70	-	-	33	67
RSD (preferred)	21	9	23	11	47	26	-	-	17	17
CPUE (preferred)	1.7	0.7	1.0	0.3	2.4	1.7	-	-	0.7	0.3
CPUE (memorable)	0.7	0.0	0.0	0.0	0.0	0.7	-	-	0.0	0.0
CPUE (trophy)	0.3	0.0	0.0	0.0	0.4	0.0	-	-	0.0	0.0
CPUE (total)	14.0	9.7	6.3	3.0	6.0	10.7	-	-	4.0	2.7
CPUE ≥ Stock	13.0	7.4	4.3	3.0	6.0	9.0	-	-	4.0	2.0
CPUE ≥ Preferred	2.7	0.7	1.0	0.3	2.8	2.3	-	-	0.7	0.3
CPUE ≥ MLL (18-inches)	0.7	0.0	0.0	0.0	0.4	0.3	-	-	0.0	0.0
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	83.1	79.7	79.8	75.3	76.3	76.2	-	-	80.6	78.7
Quality	81.6	73.4	82.1	71.0	84.7	80.8	-	-	81.3	77.3
Preferred	78.6	83.5	75.8	-	75.7	72.9	-	-	74.5	75.0
Memorable	75.6	-	-	-	-	78.3	-	-	-	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	-	-	-	-	-	0.43	0.41	-	0.41	-
Harvest Rate (intended)	-	-	-	-	-	0.00	0.00	-	0.00	-
% Released	-	99.2%	100.0%	-	-	99.4%	100.0%	-	100.0%	-
Mean Weight	-	3.40	-	-	-	1.30	-	-	-	-



**Spotted Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recruitment</b> (electrofishing)										
Substock CPUE	9.00	8.00	9.00	3.00	1.20	3.00	-	-	1.33	1.33
<b>Density</b> (electrofishing)										
PSD	33	22	18	26	33	32	-	-	16	21
RSD (preferred)	2	1	1	1	-	-	-	-	5	-
CPUE (total)	46.0	51.3	38.7	35.7	18.4	21.7	-	-	7.7	9.3
CPUE $\geq$ Stock	37.0	43.3	29.7	32.7	17.2	18.7	-	-	6.3	8.0
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (spring electrofishing)										
Stock	87.6	83.8	82.5	88.2	86.0	88.3	-	-	87.6	84.9
Quality	83.8	74.7	76.4	80.1	79.3	84.0	-	-	77.2	78.4
Preferred	86.9	65.3	82.8	73.5	-	-	-	-	82.8	-
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (intended)	-	-	-	-	-	-	-	-	-	-
Harvest Rate (intended)	-	-	-	-	-	-	-	-	-	-
% Released	-	98.5%	100.0%	-	-	100.0%	-	-	100.0%	-
Mean Weight	-	2.10	-	-	-	-	-	-	-	-

**Black Crappie**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (electrofishing)										
PSD	100	100	100	50	100	100	-	-	93	100
RSD (preferred)	71	100	100	50	100	67	-	-	47	29
CPUE (total)	2.3	1.3	0.7	1.3	0.4	4.0	-	-	5.0	2.3
CPUE ≥ Stock	2.3	1.3	0.7	1.3	0.4	4.0	-	-	5.0	2.3
CPUE ≥ MLL (10-inches)	1.3	1.3	0.7	0.7	0.4	2.3	-	-	2.0	0.7
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	-	-	-	-	-	-	-	-	-
Quality	81.5	-	-	-	-	80.4	-	-	79.7	76.9
Preferred	78.2	79.5	78.9	79.0	84.5	79.9	-	-	79.9	80.4
Memorable	78.0	-	-	71.0	-	74.1	-	-	73.5	70.7
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	-	67,903	63,333	-	-	56,778	50,778	-	53,193	-
Angler Hours/Acre	-	4.2	3.9	-	-	3.5	3.2	-	3.3	-
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	-	2.02	1.79	-	-	1.50	2.26	-	2.10	-
Harvest Rate (any crappie)	-	0.69	0.55	-	-	0.73	1.33	-	0.56	-
% Released (black crappie)	-	40.5%	25.8%	-	-	38.8%	15.5%	-	93.8%	-
Mean Weight (black crappie)	-	0.95	0.73	-	-	1.33	1.10	-	1.33	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	-	\$179,670	\$182,140	-	-	\$227,760	\$212,670	-	\$180,740	-

## White Crappie

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Density</b> (electrofishing)										
PSD	100	100	100	100	100	100	-	-	100	97
RSD (preferred)	63	67	78	44	100	75	-	-	33	26
CPUE (total)	15.3	3.0	3.0	11.3	0.8	17.7	-	-	19.3	25.3
CPUE ≥ Stock	15.3	3.0	3.0	11.3	0.8	17.7	-	-	19.3	25.3
CPUE ≥ MLL (10-inches)	8.0	1.3	1.7	5.0	0.8	11.3	-	-	5.3	4.0
<b>Growth</b> (electrofishing)										
Length Age-1	-	-	-	-	-	-	-	-	-	-
Length Age-3	-	-	-	-	-	-	-	-	-	-
<b>Condition</b> (electrofishing)										
Stock	-	-	-	-	-	-	-	-	-	87.9
Quality	80.9	76.9	82.6	79.1	-	83.4	-	-	82.1	77.8
Preferred	78.2	74.2	80.5	76.7	77.3	82.3	-	-	79.3	76.9
Memorable	74.7	-	76.9	78.1	-	77.6	-	-	78.4	92.9
<b>Mortality</b> (electrofishing)										
Total Mortality	-	-	-	-	-	-	-	-	-	-
<b>Angling Pressure</b> (creel)										
Angler Hours (all crappie)	-	67,903	63,333	-	-	56,778	50,778	-	53,193	-
Angler Hours/Acre	-	4.2	3.9	-	-	3.5	3.2	-	3.3	-
<b>Fishing Success</b> (creel)										
Catch Rate (any crappie)	-	2.02	1.79	-	-	1.50	2.26	-	2.10	-
Harvest Rate (any crappie)	-	0.69	0.55	-	-	0.73	1.33	-	0.56	-
% Released (white crappie)	-	69.9%	74.6%	-	-	59.4%	46.2%	-	75.8%	-
Mean Weight (white crappie)	-	0.61	0.69	-	-	1.14	1.10	-	1.10	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Crappie	-	\$179,670	\$182,140	-	-	\$227,760	\$212,670	-	\$180,740	-

**Walleye**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Stocking</b>										
#	0	44,228	51,794	21,160	30,400	68,454	67,032	0	60,960	159,753
#/Acre	0.0	2.8	3.2	1.3	1.9	4.3	4.2	0.0	3.8	9.9
<b>Angling Pressure (creel)</b>										
Angler Hours	-	9,239	2,523	-	-	4,850	1,908	-	5,128	-
Angler Hours/Acre	-	0.6	0.2	-	-	0.3	0.1	-	0.3	-
<b>Fishing Success (creel)</b>										
Catch Rate (intended)	-	0.29	0.17	-	-	0.23	0.00	-	0.12	-
Harvest Rate (intended)	-	0.10	0.02	-	-	0.11	0.00	-	0.05	-
% Released	-	68.9%	81.5%	-	-	48.6%	-	-	54.3%	-
Mean Weight	-	2.93	4.08	-	-	3.35	-	-	3.41	-
<b>Value of Fishery (Trip Expenditures - creel)</b>										
Walleye	-	\$31,780	\$13,310	-	-	\$33,790	\$12,260	-	\$31,580	-

**Striped Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure (creel)</b>										
Angler Hours	-	2,330	983	-	-	1,329	1,712	-	866	-
Angler Hours/Acre	-	0.1	0.1	-	-	0.1	0.1	-	0.1	-
<b>Fishing Success (creel)</b>										
Catch Rate (intended)	-	0.31	0.23	-	-	0.00	0.30	-	0.00	-
Harvest Rate (intended)	-	0.04	0.00	-	-	0.00	0.00	-	0.00	-
% Released	-	96.2%	98.9%	-	-	100.0%	100.0%	-	-	-
Mean Weight	-	41.25	3.15	-	-	-	-	-	-	-
<b>Value of Fishery (Trip Expenditures - creel)</b>										
Striped Bass	-	\$11,730	\$3,890	-	-	\$7,870	\$27,930	-	\$4,410	-

## Sunfish

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all sunfish)	-	402	1,553	-	-	1,314	390	-	-	-
Angler Hours/Acre	-	0.0	0.1	-	-	0.1	0.0	-	-	-
<b>Fishing Success</b> (creel)										
Catch Rate (any sunfish)	-	2.50	2.73	-	-	1.89	1.63	-	-	-
Harvest Rate (any sunfish)	-	0.00	0.63	-	-	0.73	0.89	-	-	-
% Released (bluegill)	-	80.0%	86.9%	-	-	62.9%	88.7%	-	84.4%	-
Mean Weight (bluegill)	-	0.42	0.49	-	-	0.51	0.69	-	0.56	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Sunfish	-	\$440	\$3,080	-	-	\$4,900	\$1,250	-	-	-

## Catfish

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Angling Pressure</b> (creel)										
Angler Hours (all catfish)	-	552	940	-	-	323	791	-	723	-
Angler Hours/Acre	-	0.0	0.1	-	-	0.0	0.0	-	0.0	-
<b>Fishing Success</b> (creel)										
Catch Rate (any catfish)	-	0.00	0.00	-	-	0.00	0.00	-	0.00	-
Harvest Rate (any catfish)	-	0.00	0.00	-	-	0.00	0.00	-	0.00	-
% Released (channel)	-	-	-	-	-	0.0%	22.4%	-	-	-
Mean Weight (channel)	-	-	-	-	-	5.20	2.47	-	-	-
<b>Value of Fishery</b> (Trip Expenditures - creel)										
All Catfish	-	\$7,070	\$3,210	-	-	\$1,110	\$3,570	-	\$820	-

## Habitat Enhancement

Type of Work	Details	Quantity	
		New	Renovated
Rebrush	none	none	none

## Watauga Reservoir

### Description

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<b>Surface Area:</b> 6,430 acres	<b>Shoreline Distance:</b> 105 miles
<b>Counties:</b> Carter, Johnson	<b>Drainage Area:</b> 468 square miles
<b>Full Pool Elevation:</b> 1,959 feet above mean sea level	<b>Mean Annual Fluctuation:</b> 44 feet
<b>Maximum Depth:</b> 312 feet	<b>Thermocline Depth:</b> 30 feet
<b>Mean Chlorophyll (Forebay):</b> 4.0 parts per million	<b>Shoreline Development:</b> 21%
<b>Trophic Status (Forebay):</b> Mesotrophic	<b>Trophic Index, Carlson (1977):</b> 44.3
<b>Hydraulic Retention Time:</b> 400 days	<b>Reservoir Age:</b> 66 years (dam completed 1948)
<b>Total Fishing Effort:</b> No Survey	<b>Total Value by Anglers:</b> No Survey

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### Summary:

#### Electrofishing

The largemouth bass catch rates for Watauga Reservoir were slightly below average in 2014 at 11.8 fish/hour. However, a PSD value of 56 would indicate that the reservoir has a good size structure. There was also a good percentage of largemouth collected over the 12-inch MLL. Relative weights were about average for Watauga Reservoir.

Smallmouth bass catch rates were also a little below average at about 14 fish /hour. However, there was a large percentage of fish collected over the 15-inch MLL (55%). Smallmouth bass relative weights were about average for Watauga Reservoir.

The slightly below average numbers of largemouth and smallmouth bass collected is possible due to colder water temperatures at the time of sampling. The cooler water temperatures probably resulted in fewer fish being shallow and susceptible to electrofishing equipment.

#### Gill Netting

On December 9, 2014 we collected 90 walleye in six experimental gill nets on South Holston Reservoir. The gill nets were set from Observation Knob Park downstream to Big Creek.

The catch rates were above average at 15 fish per net night. A large percentage of the fish collected (75%) were above the 18-inch size limit, indicating that the fish are recruiting into the larger size classes.

These catch rates combined with the large percentage of walleye collected over 18-inches should indicate that the walleye fishing will be good on South Holston Reservoir in 2015.

#### Trap Netting

There was no trap netting conducted on South Holston Reservoir in 2014

**Habitat Enhancement**

There was no habitat enhancement on South Holston Reservoir in 2014.

**Water Quality**

Water quality samples were collected at two sites on Watauga Reservoir during July, August, and September 2014. The results from these samples were normal for South Holston Reservoir.

**Lakewide Angling Summary**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Angling Pressure										
Angler Hours	144,608	no survey	no survey	no survey	no survey	no survey	no survey	178,182	no survey	no survey
Angler Hours Per Acre	22.5	no survey	no survey	no survey	no survey	no survey	no survey	27.7	no survey	no survey
Angler Trips	21,922	no survey	no survey	no survey	no survey	no survey	no survey	28,756	no survey	no survey
Value of Fishery (angler expenditures creel)										
All Species	\$254,140	no survey	no survey	no survey	no survey	no survey	no survey	\$537,020	no survey	no survey

**Black Bass, Watauga Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Angling Pressure</b> (creel survey data)											
All Black Bass	87,482 13.6	N o	N o	64,427 10.0	N o	N o	N o	109,880 17.1	N o	N o	87,263 13.6
Any Black Bass	78,384 12.2			62,941 9.8				96,492 15.0			79,272 12.3
Largemouth Bass	0 0.0	S u r v e y	S u r v e y	360 0.1	S u r v e y	S u r v e y	S u r v e y	1,460 0.2	S u r v e y	S u r v e y	607 0.1
Smallmouth Bass	9,098 1.4			1,126 0.2				11,698 1.8			7,307 1.1
Spotted Bass	0 0.0			0 0.0				2,330 0.4			777 0.1
<b>Tournaments</b> (BITE program & creel survey data)											
# Tournaments (BITE)	1	1									1
Pounds/Angler Day (BITE)	2.74	2.46	none reported	none reported	none reported	none reported	none reported	none reported	none reported	none reported	2.60
Bass/Angler Day (BITE)	1.46	1.43									1.45
<b>Value of Fishery</b> (creel survey data - trip expenditures)											
All Black Bass	\$172,120			\$259,440				\$368,410			\$159,994
Any Black Bass	\$161,580	No Survey	No Survey	\$254,040	No Survey	No Survey	No Survey	\$321,660	No Survey	No Survey	\$245,760
Largemouth Bass	\$0			\$4,320				\$1,700			\$2,007
Smallmouth Bass	\$10,540			\$1,080				\$37,240			\$16,287
Spotted Bass	\$0			\$0				\$7,810			\$2,603

**Largemouth Bass, Watauga Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (electrofishing data)											
Age-1 CPUE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Substock CPUE	0.6	0.4	0.8	0.6	1.0	0.6	1.0	0.4	0.8	0.6	0.7
<b>Density</b> (electrofishing data - CPUE = # fish/hour)											
PSD	82%	78%	82%	94%	91%	91%	92%	89%	76%	56%	83%
RSD - Preferred	64%	48%	55%	75%	68%	65%	78%	61%	55%	61%	63%
CPUE	15.1	15.1	20.0	21.2	23.0	20.2	22.0	20.8	14.0	11.8	18.3
CPUE ≥ Stock	14.5	14.7	19.2	20.6	22.0	19.6	21.0	20.4	13.2	11.2	17.6
CPUE ≥ MSL (12")	11.9	11.2	15.6	19.4	20.0	17.6	19.0	17.4	9.6	9.0	15.1
<b>Growth</b> (electrofishing data)											
Mean TL at Age-1 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mean TL at Age-3 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Relative Weight</b> (electrofishing data)											
Stock - Quality	88.5	84.2	84.2	86.4	83.7	86.5	83.5	81.3	83.8	86.6	84.9
Quality - Preferred	88.7	90.9	91.2	88.3	89.4	87.5	97.7	95.2	92.3	91.8	91.3
Preferred - Memorable	95.7	95.7	93.6	95.5	95.9	94.3	100.5	99.6	95.2	90.0	95.6
Memorable - Trophy	91.7	94.5	97.5	97.8	94.7	94.7	102.0	95.6	96.1	96.0	96.1
Trophy	none	none	none	none	none	none	none	none	none	none	none
<b>Mortality</b> (electrofishing data)											
Total Mortality	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Fishing Success</b> (creel survey data)											
Catch Rate	0.08	No	No	0.13	No	No	No	0.14	No	No	0.12
Harvest Rate	0.00			0.01				0.00			0.00
Percent Harvested	5.2%	Survey	Survey	6.3%	Survey	Survey	Survey	1.0%	Survey	Survey	4.2%
Mean Weight (pounds)	2.55			2.29				2.90			2.58



**Smallmouth Bass, Watauga Reservoir**

<b>Smallmouth Bass</b>											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (electrofishing data)											
Age-1 CPUE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Substock CPUE	0.4	1.2	3.8	0.6	1.0	1.6	0.2	0.6	0.4	0.6	1.0
<b>Density</b> (electrofishing data - CPUE = # fish/hour)											
PSD	88%	77%	66%	87%	85%	84%	94%	99%	87%	91%	86%
RSD - Preferred	71%	54%	47%	56%	60%	78%	80%	90%	81%	69%	69%
CPUE	14.1	19.9	28.2	30.8	24.6	11.8	31.8	21.0	16.0	14.0	21.2
CPUE ≥ Stock	13.7	18.7	24.4	30.2	23.6	10.2	31.6	20.4	15.6	13.4	20.2
CPUE ≥ MSL (15")*	10.9	12.7	14.6	8.2	8.8	6.2	20.0	14.8	11.0	7.4	11.5
<b>Growth</b> (electrofishing data)											
Mean TL at Age-1 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mean TL at Age-3 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	246
<b>Relative Weight</b> (electrofishing data)											
Stock - Quality	92.9	93.1	82.1	84.6	90.2	85.5	84.9	85.9	95.2	76.9	87.1
Quality - Preferred	171.9	90.5	83.1	86.8	91.5	84.8	90.9	86.5	88.6	89.2	96.4
Preferred - Memorable	81.6	86.2	86.6	88.1	84.5	86.3	93.3	89.8	86.3	82.9	86.6
Memorable - Trophy	80.8	84.5	84.3	86.3	84.1	82.6	93.4	88.7	86.3	78.8	85.0
Trophy	none	none	none	none	none	none	none	none	none	none	none
<b>Mortality</b> (electrofishing data)											
Total Mortality	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.48
<b>Fishing Success</b> (creel survey data)											
Catch Rate	0.17	No	No	0.24	No	No	No	0.34	No	No	0.25
Harvest Rate	0.01			0.01				0.02			0.01
Percent Harvested	7.1%	Survey	Survey	5.7%	Survey	Survey	Survey	6.5%	Survey	Survey	6.4%
Mean Weight (pounds)	2.41			2.72				3.66			2.93

\* 18" MLL in effect in 2008, 18" in 2009, and 15" in 2010

**Spotted Bass, Watauga Reservoir****Spotted Bass**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
Recruitment (electrofishing data)											
Substock CPUE	0.20	0.40	0.00	1.00	2.00	0.80	0.20	1.20	1.40	0.80	0.80
Density (electrofishing data - CPUE = # fish/hour)											
PSD	50%	52%	82%	49%	57%	60%	74%	99%	68%	76%	67%
RSD - Preferred	36%	4%	29%	7%	14%	26%	37%	90%	19%	21%	28%
CPUE	2.98	5.76	3.40	16.20	16.80	14.80	15.80	15.00	12.80	14.80	11.83
CPUE ≥ Stock	2.78	5.36	3.40	15.20	14.80	14.00	15.60	13.80	11.40	14.00	11.03
CPUE ≥ MSL	N o M i n i m u m S i z e L i m i t										
Relative Weight (electrofishing data)											
Stock - Quality	89.8	101.3	96.4	98.7	100.9	94.3	99.6	96.1	103.8	104.5	98.5
Quality - Preferred	99.1	101.1	95.0	95.4	95.0	95.6	103.6	99.0	104.5	102.4	99.1
Preferred - Memorable	101.2	104.7	115.8	102.3	104.1	103.4	113.2	105.6	105.0	99.5	105.5
Memorable - Trophy	none	none	none	none	none	124.0	none	none	none	none	124.0
Trophy	none	none	none	none	none	none	none	none	none	none	none
Fishing Success (creel survey data)											
Catch Rate	0.02	No	No	0.15	No	No	No	0.34	No	No	0.17
Harvest Rate	0.00			0.04				0.03			0.02
Percent Harvested	5.2%	Survey	Survey	27.5%	Survey	Survey	Survey	10.1%	Survey	Survey	14.3%
Mean Weight (pounds)	2.55			1.23				1.52			1.77



**Black Crappie, Watauga Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (electrofishing data) - CPUE = # fish/ hour											
Age-0 CPUE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Substock CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Density</b> (electrofishing data) - CPUE = # fish/ hour											
PSD	100%	100%	none	none	100%	100%	89%	100%	86%	86%	95%
RSD - Preferred	50%	75%	none	none	33%	71%	56%	93%	86%	57%	65%
CPUE	0.40	0.80	0.00	0.00	0.60	1.40	1.80	2.80	2.80	1.40	1.20
CPUE ≥ Stock	0.40	0.80	0.00	0.00	0.60	1.40	1.80	2.80	2.80	1.40	1.20
CPUE ≥ MSL (10")	0.20	0.60	0.00	0.00	0.20	0.80	1.00	2.40	2.40	0.80	0.84
<b>Growth</b> (electrofishing data)											
Mean TL at Age-1 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mean TL at Age-3 (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Relative Weight</b> (electrofishing data)											
Stock - Quality	none	none	none	none	none	none	90.7	none	91.8	100.7	94.4
Quality - Preferred	110.3	98.1	none	none	98.7	96.1	94.2	78.0	89.3	92.3	94.6
Preferred - Memorable	none	84.7	none	none	53.8	93.6	83.9	87.6	88.7	105.4	85.4
Memorable - Trophy	90.4	89.3	none	none	none	85.0	86.0	95.3	none	92.0	89.7
Trophy	none	none	none	none	none	none	none	none	none	none	none
<b>Mortality</b> (electrofishing data)											
Total Mortality	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Stocking</b>											
# per Acre	0.0	0.0	0.0	10.0 *	8.1 *	4.9 *	0.0 *	4.9 *	6.6 *	5.3 *	4.0
<b>Angling Pressure</b> (creel survey data - any crappie)											
Angler Hours	7,553	N	N	1,821	N	N	N	3,245	N	N	4,206
Angler Hours/Acre	1.2		o	0.3	o	o	o	0.5	o	o	0.1
<b>Fishing Success</b> (creel survey data)											
Catch Rate	0.08	S	S	0.00	S	S	S	0.58	S	S	0.22
Harvest Rate	0.07	u	u	0.00	u	u	u	0.32	u	u	0.13
Percent Harvested	69.2%	r	r	none	r	r	r	57.8%	r	r	63.5%
Mean Weight (pounds)	0.95	v	v	none	v	v	v	1.13	v	v	1.04
<b>Value of Fishery</b> (creel survey data - trip expenditures)											
Any Crappie	\$11,240	y	y	\$2,080	y	y	y	\$6,790	y	y	\$6,703

\* Black and Blacknose Crappie

**Walleye, Watauga Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Recruitment</b> (winter gill net data)											
Substock CPUE	No Sample	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.03
<b>Density</b> (winter gill net data - CPUE = # fish/net night)											
PSD		99%	95%	82%	90%	100%	92%	100%	93%	92%	94%
RSD - Preferred	No	51%	38%	43%	34%	29%	42%	43%	57%	38%	42%
CPUE		6.29	9.43	12.30	22.29	4.67	17.7	7.7	17.8	12.30	12.3
CPUE ≥ Stock	Sample	6.25	9.43	12.25	22.29	4.67	17.7	7.7	17.8	12.20	12.2
CPUE ≥ MSL (18")		5.00	5.14	9.00	9.00	4.08	11.7	5.7	15.0	6.30	7.9
<b>Growth</b> (winter gill net data)											
Mean TL at Age-1 (mm)	No	424	429	431	416	409	405	No	399	No	416.1429
Mean TL at Age-3 (mm)	Sample	494	485	534	537	none	517	Sample	505	Sample	512
<b>Relative Weight</b> (winter gill net data)											
Stock - Quality		102.7	98.4	93.3	97.0	none	96.7	none	102.4	103.3	99.1
Quality - Preferred	No	97.3	93.0	96.6	95.6	99.2	95.4	98.6	99.3	96.3	96.8
Preferred - Memorable		94.9	93.1	94.2	95.4	102.4	94.5	97.6	95.2	97.3	96.1
Memorable - Trophy	Sample	90.0	87.7	90.4	91.1	89.9	81.1	92.6	91.7	147.7	95.8
Trophy		none	none	none	none	none	none	none	none	none	none
<b>Mortality</b> (winter gill net data)											
Total Mortality	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Stocking</b>											
# per Acre	15.4	11.9	5.5	6.4	7.4	6.5	0.0	0.0	4.7	5.5	6.3
<b>Angling Pressure</b> (creel survey data)											
Angler Hours	16,980	N	N	13,148	N	N	N	8,569	N	N	12,899
Angler Hours/Acre	2.64		o	2.04	o	o	o	1.30	o	o	2.01
<b>Fishing Success</b> (creel survey data)											
Catch Rate	not calculated	S	S	not calculated	S	S	S	not calculated	S	S	
Harvest Rate	not calculated	u	u	not calculated	u	u	u	not calculated	u	u	
Percent Harvested	71.2%	r	r	71.6%	r	r	r	88.0%	r	r	76.9%
Mean Weight (pounds)	3.96	v	v	3.85	v	v	v	4.65	v	v	4.15
					e	e	e		e	e	
<b>Value of Fishery</b> (creel survey data - trip expenditures)											
Walleye Data Only	\$30,220	y	y	\$47,990	y	y	y	\$37,360	y	y	\$38,523

\* Fry - Not calculated in the mean



**Trout, South Watauga Reservoir**

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Angling Pressure</b> (creel survey data)												
All Trout	(hrs)	16,566	N	N	34,101	N	N	N	32,262	N	N	27,643
	(hrs/acre)	2.6	o	o	5.3	o	o	o	5.0	o	o	4.3
Any Trout	(hrs)	6,709			28,146				13,308			16,054
	(hrs/acre)	1.0			4.4				2.1			2.5
Rainbow Trout	(hrs)	3,663	S	S	558	S	S	S	7,579	S	S	3,933
	(hrs/acre)	0.6	u	u	0.1	u	u	u	1.2	u	u	0.6
Brown Trout	(hrs)	0	v	v	0	v	v	v	0	v	v	0
	(hrs/acre)	0.0	e	e	0.0	e	e	e	0.0	e	e	0.0
Lake Trout	(hrs)	6,194	y	y	5,397	y	y	y	11,375	y	y	7,655
	(hrs/acre)	1.0			0.8				1.8			1.2
<b>Value of Fishery</b> (creel survey data - trip expenditures)												
All Trout		\$24,430			\$91,220				\$81,890			\$65,847
Any Trout		\$7,470	No	No	\$64,770	No	No	No	\$52,130	No	No	\$41,457
Rainbow Trout		\$4,010	Survey	Survey	\$720	Survey	Survey	Survey	\$5,110	Survey	Survey	\$3,280
Brown Trout		\$0			\$0				\$0			\$0
Lake Trout		\$12,950			\$25,730				\$24,650			\$21,110

**Lake Trout, Watauga Reservoir**

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Fishing Success</b> (creel survey data)												
Catch Rate	not calculated		No	No	not calculated	No	No	No	not calculated	No	No	
Harvest Rate	not calculated				not calculated				not calculated			
Percent Harvested	58.6%	Survey	Survey		64.7%	Survey	Survey	Survey	38.3%	Survey	Survey	53.9%
Mean Weight (pounds)	6.68				3.09				2.88			4.22

**Sunfish, Watauga Reservoir**

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Angling Pressure</b> (creel survey data - any sunfish)												
Angler Hours	* 1,529		N	N	5,821	N	N	N	5,820	N	N	4,390
Angler Hours/Acre	0.24				0.91	o	o	o	0.90	o	o	0.68
<b>Fishing Success</b> (creel survey data - bluegill only)												
Catch Rate (bluegill)	1.52	S		S	2.40	S	S	S	1.77	S	S	1.90
Harvest Rate (bluegill)	0.28	u		u	0.42	u	u	u	0.00	u	u	0.23
% Harvested (bluegill)	9.6%	r		r	7.5%	r	r	r	1.9%	r	r	6.3%
Mean Weight (bluegill)	0.02	v		v	0.20	v	v	v	0.25	v	v	0.16
<b>Value of Fishery</b> (creel survey data - trip expenditures)												
Any Sunfish		\$880			\$21,080	y	y	y	\$6,520	y	y	\$9,493

**Catfish, Watauga Reservoir**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Mean
<b>Angling Pressure</b> (creel survey data - any catfish)											
Angler Hours	1,810	N	N	2,222	N	N	N	not calculated	N	N	2,016
Angler Hours/Acre	0.28	-	o	0.35	o	o	o	not calculated	o	o	0.07
<b>Fishing Success</b> (creel survey data)											
Catch Rate (channel cat)	0.10	S	S	0.22	S	S	S	not calculated	S	S	0.16
Harvest Rate (channel cat)	0.10	u	u	0.10	u	u	u	not calculated	u	u	0.10
% Harvested (channel cat)	56.1%	r	r	43.3%	r	r	r	16.2%	r	r	38.5%
Mean Weight (channel cat)	3.91	v	v	2.98	v	v	v	4.56	v	v	3.816667
<b>Value of Fishery</b> (creel survey data - trip expenditures)											
Any Catfish	\$4,010	y	y	\$4,060	e	e	e	not calculated	e	e	\$4,035

**Habitat Enhancement Watauga Reservoir**

Type of Work	Details	Quantity	
		New	Renovated

\*No Habitat Work in 2014

**Water Quality Monitoring Watauga Reservoir**

Parameter	Sampling Period	Water Quality
Temperature	July to September	normal
Dissolved Oxygen	July to September	normal



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## Glossary

**Biomass:** weight of species or group of species expressed in pounds per acre or kilograms per hectare

**Catch-Curve:** a graph representing the relative abundance of various year-classes of a fish species. Used to measure the total mortality effecting the various year-classes present in the population.

**Density:** The abundance of fish in a population measured through catch-per-unit of effort. E.g. bass density is measured in number of fish caught per hour of electrofishing.

**Exploitation:** fish harvested or removed from the population by the fisherman. Measured through creel survey trends and catch-curve analysis.

**Florida Bass:** a subspecies of largemouth bass (*Micropterus salmoides floridanus*) native to the lower Florida peninsula. Desired for their ability to obtain relatively large sizes and advanced ages.

**Growth:** change in fish length with time. Measured as the average length of the fish at each age or length at which it enters the fishery (mean length of Age 3 bass).

**Interspecific competition:** Competition between two or more species for food or space when (and only when) either is limited.

**Memorable-Size:** The size when fish become memorable to catch (e.g. 20-25" for largemouth bass).

**Mortality:** removal of fish from the population by death, either by natural causes or harvest by a fisherman. Total mortality is a combination of both factors, and is indirectly assessed with Proportional and Relative Stock Density indices. Fishing mortality alone is measured by exploitation studies for creel census surveys.

**Preferred-size:** The size preferred by most fishermen to catch. (e.g. 15"-20" for largemouth bass).

**Proportional Stock Density:** an index that expresses the proportion of quality-sized fish to stock size fish. Used as an indirect measure of total mortality.

**Quality Size:** The size at which most fishermen begin to keep fish of a particular species (12"-15" for largemouth bass).

**Recruitment:** number of fish spawned that survived to be captured by a particular sampling gear. (e.g. for bass it is measured as the number of Age 1 bass in spring electrofishing; Crappie – number of age 0 collected with fall trapnettings).

**Relative Stock Density:** an index that expresses the proportion of preferred-size fish to stock size fish.

**Stock Size:** The age 1 and age 2 fish that will grow replace larger fish that are removed by fishing or natural death.

**Year-class:** a species group spawned in the same year.

**Young of the Year (YOY):** Fish produced during the current with an assumed birthdate of January 1.  
Also referred to as Age-0 fish.